Busy Person Patterns

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ABSTRACT

This paper presents thirteen patterns that, when used together, we have found helpful to manage our busy lives. Recording these patterns in a format that others can both understand and use is the result of an assignment for a course on Patterns at Pace University with instructors Dr. Joe Bergin and Dr. Fred Grossman. Surprisingly, many of these patterns have general applicability to other areas of study. Good Enough, for example, draws from Linda Rising's same-named pattern for software development [1]. Others, like JUST START, can be found in various forms in other pattern languages (e.g. Coplien and Harrison's GET ON WITH IT [2] or Manns and Rising's JUST DO IT [3]).

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1. INTRODUCTION

How doth the little busy bee Improve each shining hour And gather honey all the day From every opening flower!

Isaac Watts (1674-1748), Divine Songs, 20, Against Idleness and Mischief, 1720.

In every job that must be done, there is an element of fun, you find the fun and – SNAP – the job's a game.

> Bill Walsh and Don Da Gradi, Mary Poppins (Screenplay), 1964.

Do you ever feel overwhelmed by the quantity or size of the tasks that you need to complete? Perhaps you are juggling a

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family, an advanced degree, a demanding job, and the need for some personal time. Possibly, you devote a significant amount of time to your children, others, or the community.

Like you, we have experienced this feeling of busyness—having a lot to do in what seems like too little time. In fact, we always seem to be busy! A conversation about our collective busyness made us realize that we were all doing similar things to help us cope with the condition: insight that might be useful to others.

This paper presents thirteen patterns that, when used together, we have found helpful to manage our busy lives. Recording these patterns in a format that others can both understand and use is the result of an assignment for a course on Patterns at Pace University with instructors Dr. Joe Bergin and Dr. Fred Grossman. Surprisingly, many of these patterns have general applicability to other areas of study. Good Enough, for example, draws from Linda Rising's same-named pattern for software development [1]. Others, like Just Start, can be found in various forms in other pattern languages (e.g. Coplien and Harrison's GET ON WITH IT [2] or Manns and Rising's JUST DO IT [3]).

The thirteen patterns that follow represent nuggets of experience that we believe will be useful to the busy person.

2. JUST START

You have a task that cannot wait until you have all the information about it to begin. It may be time sensitive, you may have a deadline, or part of the task may be to identify its parts. Most important, you feel internal or external pressure to begin and have some level of confidence about the task's overall direction.

- The initial information given with a task may not be conducive to understanding it immediately.
- Tasks may be vague in their definition.
- Just by starting a task, you do not guarantee that you can figure it out and complete it.
- You can waste time fumbling through starting the task without a clear idea what you need to do.
- While you are starting one task, you are putting off other tasks.
- Some organizations may punish initiative.
- You may be afraid to start.
- By not starting a task, you do not know whether you can complete it.

- + If you do not start a task, you cannot complete it.
- + Starting something new can be satisfying and give you a sense of accomplishment.

Therefore, when faced with a vague task, start working on it to see if the steps you need to complete it emerge.

2.1 Commentary

Procrastination is the enemy of a busy person. Procrastination pushes things to the end and makes it almost impossible to get through the work you need to complete. It is often easier to take well-defined tasks and complete them first, but it is also important to start vague tasks to attempt to gain an understanding as to how long they will take (see Feedback Loop). You can always PUT IT OFF once you get an idea of what you need to do. You can also Seek Clarification from someone if the task does not become clear after you start.

Another pattern that can help define a poorly defined or vague task is CARDBOARD CONSULTANT by Charles Weir and James Noble [4].

2.2 Resulting Context

Just starting a vague task can permit you to obtain the information you need to complete it. Paradoxically, it may also help you overcome the fear of starting a seemingly complex task. If the task remains vague, follow it with SEEK CLARIFICATION. In some cases where the task has become less vague, but is still not completely clear, follow it with PUT IT OFF.

Another less desirable result is that you could waste too much time and mental energy attempting to solve something that really needs you to <u>Seek Clarification</u>. There is a subtlety between knowing when just starting is not the right thing to do and when to stop and <u>Seek Clarification</u>. A key indicator may be that you are feeling frustrated and the task is devoid of all fun and energy. If you begin a vague task in hopes of understanding it as you go and put off other work, you may be unable to complete either task. If you find yourself in this situation, you may be able to remedy it by attempting to <u>Seek Clarification</u> and <u>Prioritize</u>.

2.3 Examples

- Assume that you receive a personnel resource spreadsheet with many vague tabs. Although the instructions indicate it will take five minutes to complete, you cannot tell if it will take that long or longer because the information requirements are vague. If you JUST START to fill it out, you may determine the information you require and not have to SEEK CLARIFICATION. The hope is that the information requirements will emerge and you will understand the amount of time it will take. While it may not take five minutes to complete, it may be containable within a fifteenminute time block.
- Assume you are filling out a complex tax form for your tax return. The instructions for the form are complex and somewhat vague. You have additional information to help you fill out the form, but that information is also vague because it is not specific to your data. Seeking clarification

- from the taxing authority can be difficult. By just starting the form, the meaning of the instructions may emerge.
- Assume you are a student that has an assignment requiring
 breakthrough thinking. The assignment's parameters are
 vague in order to foster innovation on your part. It may help
 to <u>Seek Clarification</u>, but you already know you will not
 receive specific instructions indicating a specific deliverable.
 Beginning the assignment will help you identify those areas
 where you may truly require clarification or additional
 information.

3. CONTIGUOUS TIME BLOCKS

You have the information you need to complete a task and you are determining how you will complete it. You have several other tasks you need to complete and you frequently fragment your time. You feel that you must prevent interruptions to advance this task.

- Setting aside time does not guarantee it will not be interrupted.
- It is not always possible to obtain contiguous time blocks of the desired duration.
- Working on one task for a significant amount of time can cause fatigue.
- + Complex tasks require a certain amount of think time to be completed.
- + Human concentration, when broken, can cause a task to take longer than originally anticipated. (See [5] for one study on the effects of interruptions and broken concentration on task time).
- + Smaller allocated time blocks create interruptions that cause you to stop and re-start a task.

Therefore, set aside a block of time to complete the task so that you are able to perform the task without interruption until you are comfortable with how the task is progressing.

3.1 Commentary

You can precede this pattern by using <u>JUST START</u> and <u>FEEDBACK LOOP</u>. You may use it with <u>SINGLE-TASK IMPORTANT ITEMS</u>, <u>SEEK CLARIFICATION</u>, <u>STRIKE WHEN YOU ARE HOT</u>, and PUT IT OFF.

This is a pattern about limiting interruptions so that you can concentrate on a complex task. It attempts to address the feelings of overload that humans experience when there is too much context switching. Interruptions can come in at least two forms: Those you impose upon yourself through fragmenting your time and those that outside forces impose upon you. Even though there is a potential task re-start penalty when you impose interruptions upon yourself, there is a quantifiable task re-start consequence when outside influences interrupt you. When you interrupt yourself, you typically do it at a logical break point—a time when you feel comfortable you can stop the task. When outside influences cause an interruption, however, your concentration on a complex problem is broken and you need to reestablish it to continue.

Unlike <u>SINGLE-TASK IMPORTANT ITEMS</u>, this pattern implies that you may again fragment your time once this task advances and you are comfortable with your progress.

If you use a <u>FEEDBACK LOOP</u>, it will help you know what to do in a contiguous time block.

3.2 Resulting Context

Using contiguous time blocks permits you to complete large, important, or complex tasks in a defined period. You can combine it with <u>SINGLE-TASK IMPORTANT ITEMS</u> and <u>STRIKE WHEN YOU ARE HOT</u>. If necessary, PUT IT OFF if there is a need to organize your thoughts. You may also combine this pattern with <u>FEEDBACK LOOP</u>.

Since it is not always possible to guarantee you are free of interruption or to obtain contiguous time blocks, it may be helpful to break the task down into smaller components and PRIORITIZE them as separate tasks. By prioritizing your tasks, you may find that you can obtain an appropriate time block even though it may be shorter than you originally desired.

Be careful not to take this pattern to an extreme. If you completely de-fragment your time, you will be unable to complete important tasks that may have an earlier due date because you will not interrupt yourself to address them.

3.3 Examples

- Assume you have a rather complex task requiring a lot of analysis, but the amount of time required to complete it is short. Often, you need time to think through the ramifications of the task. A contiguous time block will help you complete the task.
- Assume you are taking a self-paced computer-based distance education course and that you have the ability to stop and restart the course. Each time you return, you will need to recall the information you learned in a prior session to continue and perhaps complete an assessment of your progress. Dedicating a contiguous time block places an assessment of your progress in close proximity to your review of the material and increases your ability to get a good grade and pass the course.
- Assume you have a simple task to complete which has many interrelated components. The complexity is in the number of dependent items and not the task itself. Each time you stop and re-start the task, you need to expend time understanding where you were so that you can continue. A contiguous time block removes this re-start time and helps you advance the task.

4. SINGLE-TASK IMPORTANT ITEMS

You have a task to do that you and/or others consider important. Performing this task simultaneously with other tasks breaks your concentration and you find that quality is suffering. You feel that the task warrants a quality level that is impossible to produce if you perform it with other tasks.

 Interruptions are an unpleasant fact. It is often impossible to find time to work on only one thing

- because of pressure from others though in-person visits, email, IM, telephone calls, or pages.
- Single tasking does not guarantee that the results will be better than if you multitasked.
- When you perform a single task, you may be putting off tasks that are more important or time critical.
- + Important tasks, like complex tasks, require a certain amount of think time to be completed. What makes an important task different from a complex task is there is a need to attend to details the output is important.
- + Human concentration, when broken, can cause a task to take longer than originally anticipated and produce work that is not befitting the task (see [5]).
- Working on one important task may help you solve another complex problem.
- + When you fragment your time by completing multiple tasks in the same time block, you decrease the amount of concentration and attention you can give to an important task.
- + There is a certain level of satisfaction knowing that you are producing high quality results.

Therefore, isolate an important task and perform it without interruption so that you have the ability to concentrate and produce high quality output in the required amount of time.

4.1 Commentary

This pattern is different from <u>Contiguous Time Blocks</u>. Single-Task Important Items does not refer to blocking off time for a task, but refers to concentration on a single important task at a time. It also implies that advancing the task is as important as the output.

You may precede this pattern with <u>JUST START</u>. <u>JUST START</u> is a good pattern to begin tasks that you may not completely understand (even if it is important). Combine this pattern with <u>CONTIGUOUS TIME BLOCKS</u>, <u>SEEK CLARIFICATION</u>, <u>STRIKE WHEN</u> YOU ARE HOT, FEEDBACK LOOP, and DELEGATE.

When you have important tasks to complete like an executive presentation or something that will affect many people, you want the information produced to be correct. In our information-connected society, it is normal to handle email, instant messages, and phone calls while performing other tasks. While attempting to identify the context of a task, it can be extremely challenging to concentrate when you break your attention into several smaller components to, for example, answer an email. Tasks that do not have the same level of importance may be more easily multi-tasked.

4.2 Resulting Context

Single tasking an important item gives you the concentration you need to produce quality output. Concentrating on a single task does not guarantee you will be interruption-free, but it does guarantee that the task you are performing is the important one. Use this pattern in conjunction with STRIKE WHEN YOU ARE HOT and CONTIGUOUS TIME BLOCKS.

If you are not careful, you may single-task an item that is not important. In this case, the resulting context could be that you finish an unimportant task and that you are now behind on tasks that truly need to be completed.

4.3 Examples

- Assume that you have an executive summary to write. The
 content of this summary is important. Many individuals will
 read this summary and make policy decisions based upon the
 information. While defining the context of the executive
 summary, ignore email, instant messages, and the phone.
 Once you have defined the context, you may be better able to
 deal with interruptions.
- Assume that you are creating a policy for expense reimbursements. Although the task is somewhat iterative, the initial version is important as it sets the context for the iterations that follow. While creating the initial version, minimize distractions and perform it as a single task.
- Assume you have a school assignment to complete. The
 assignment is important and the output will determine your
 course grade. You will also be required to present and
 answer questions about what you produce. Because the
 output is important and you will need to remember the
 thinking that went into producing it, single task the
 assignment to prevent distractions that can affect the quality
 of the work.

5. PUT IT OFF

You have a task to complete and you are having trouble concentrating on it either because it is complex, you are fatigued, or it is large. You find that you are having difficulty advancing the task or that the task itself is becoming more confusing. Most important, you feel you do not have a good handle on how to organize the task, its output, or both.

- Procrastination can make a task more difficult to complete.
- When you are extremely fatigued, setting aside a task or sleeping may or may not help you organize your thoughts.
- It may not be possible to put it off certain tasks due to pressure to complete a task.
- Putting a task off might not result in a better organization or output.
- + When you have trouble concentrating, the work you are trying to complete takes longer.
- + When you have trouble concentrating, quality suffers.
- + Complex (or boring) tasks drain your mental resources.
- + Setting a problem aside gives your mind time to mull over the information it has already absorbed while you are doing other things [6].
- + By better organizing a task or its output, it may become easier complete.

Therefore, when faced with poor concentration on a boring or complex task with a somewhat flexible deadline, stop working on it temporarily so you can collect your thoughts. It may help to

sleep on the problem and begin working it anew once you awaken.

5.1 Commentary

You can precede this pattern with <u>Just Start</u>, <u>Seek Clarification</u>, or <u>Prioritize</u>. <u>Just Start</u> can help you get started on something you may later need to put down to organize. <u>Seek Clarification</u> can help you better define a task that you may need to put down. <u>Prioritize</u> can help you work on the most important tasks first and identify which tasks to put down. You can combine this pattern with <u>Contiguous Time Blocks</u>, <u>Batch The Simple Stuff</u>, and <u>Strike When You Are Hot</u>.

When there is a tough or long, but boring problem to solve, it is sometimes best to start it and then put it down for a while or even to sleep on it. This gives your mind time to ponder the information it has already absorbed and organize it while you are doing other things. It takes advantage of how our brains appear to work and relies on our subconscious to organize our thoughts [6]. When you are ready to pick the task back up, it should be easier to complete.

Use this pattern when you are NOT "hot" (see <u>Strike When You Are Hot</u>). Although this pattern may seem to be the antithesis of <u>Just Start</u>, it is actually complementary. The chaos at the beginning of a vague assignment can become more orderly as time passes. This is also true when an assignment is large and complex. When you put off a task, you can pick it up later refreshed to begin anew.

5.2 Resulting Context

Putting off a task can give you the time you need to understand what you need to do. Follow this pattern with <u>STRIKE WHEN YOU ARE HOT</u> and/or <u>SINGLE-TASK IMPORTANT ITEMS</u> if the task is important. <u>SEEK CLARIFICATION</u> if the task is still difficult to organize after putting it off.

If you put something off that will not benefit from downtime thinking, you are essentially procrastinating – an alternate, less appealing resulting context. In addition, it is possible for you to think you can put something down in order to organize your thoughts, but if there is no plan to return to it, it is probably procrastination.

5.3 Examples

- Assume you have an assignment to create a set of patterns as part of a pattern language. Though the task is not boring, it requires you to think in a manner that is different from other, more specific tasks. If you are not feeling the level of creativity you will need to tackle this assignment, it may be better to <u>PUT IT OFF</u> so that you can <u>STRIKE WHEN YOU ARE HOT</u>, and be more productive as a result.
- Assume that you have to create or update a set of bylaws for a volunteer or religious organization. While there are interesting aspects to the problem, the task is rather boring. Further, it could easily take a several days to organize the document. If you stop the task several times to go for a walk, have a snack, or even to watch a program on TV, when you return to the task, you may be more productive than just continuing to work the task.
- Assume you work in a large organization and have to create a summary of a problem for executive management. The

summary is not coming together properly, but you have all of the information you need to do the job. You are spending a lot of time organizing the information, but it still does not seem to be quite right. You decide to put it off by sleeping on it and resolving to finish the summary in the morning so you can <u>Strike When You Are Hot</u>. The next morning, the summary comes together quickly.

6. SEEK CLARIFICATION

You have a task to complete which is vague or has vague instructions. The task may have an aggressive deadline. Just starting the task to learn its direction does not appear to be an option. Most significant, you feel that you cannot begin the task unless you have clear instructions or you obtain additional information.

- By requesting clarification, you could irritate the individual or organization giving the task (discretion and politeness is required).
- The time used to clarify a task may take away from the time you have to complete it.
- Some organizations view asking for help as a sign of weakness and discourage people from seeking clarification.
- + When a timed task is vague, you need to determine what is truly required quickly.
- + Vague tasks take a lot of time to figure out and you could be wrong if you guess.
- + The amount of time taken to complete a vague task takes away from other tasks.
- Obtaining clarification may help you organize your thoughts and identify the information you require to complete it.

Therefore, ask the requestor for clarification so that you can focus on completing the task.

6.1 Commentary

Precede this pattern with <u>JUST START</u> or <u>FEEDBACK LOOP</u> if you think you can derive some of its requirements yourself. You can combine this pattern with <u>PUT IT OFF</u>, <u>BATCH THE SIMPLE STUFF</u>, <u>TASK JAR</u>, or <u>DROP UNIMPORTANT TASKS</u>. This pattern is related to ASK FOR HELP [3].

Perhaps one of the most frustrating types of tasks is one that is vague or has incomplete directions. Individuals that request completion of these types of tasks may be anywhere — in administrative organizations, areas of a company or institution that collect information for various reasons, the government, or even your own household or church. The request for completion of a task is not concomitant with the necessary information for an intelligent individual to address it. All too often, they may also set forth a deadline in the hopes of leaving the determination of the activities to the person performing the task.

When you are having difficulty deriving the requirements of a task because they are vague, incomplete, or incomprehensible; seeking clarification places the onus back on the requestor to provide you with the necessary information. The key point is that the individual asking for information has not provided enough information for you to proceed. By seeking clarification, you are

gathering information that will help you complete the task faster and with less think time. It also forces the person giving the task to think about what they want – sometimes this has a side benefit of helping others who are required to perform the same task.

6.2 Resulting Context

Seeking clarification for a vague task is frequently the simplest route to determining its requirements. Follow this pattern with <u>CONTIGUOUS TIME BLOCKS</u> if you now have the information you need and the task is complex, <u>SINGLE-TASK IMPORTANT ITEMS</u> if the task is important and requires attention to detail, or <u>PUT IT OFF</u> if you need to organize your thoughts.

Seeking clarification can backfire. This depends on the personality of the person who gives you the task and, in some cases, their power and authority. If the person giving a task believes you should know how to complete it, rather than gaining additional information to perform the task you will irritate them and perhaps lose their trust in your competence.

6.3 Examples

- Assume that you have a task that requires you to fill in a spreadsheet with the names of people in your department that may be available for rotational opportunities. The sheet has seven tabs to enter people by their skill-types, yet there are no instructions indicating how you would classify each individual into the tabs. The requestor requires the information urgently. You ask for clarification and propose samples that you believe might be correct (having used <u>JUST START</u>). The requestor is then required to clarify and explain what they are looking for in more detail. Note that you have also assisted the requestor because they have information that they can correct.
- Assume you are working in a company and receive an extremely vague task to fill out a form to identify funding for an area for which you are not familiar. Though it is clear that you do not possess the requested information, you are still required to fill out the form. You seek clarification from the requestor by asking questions about the format, requesting assistance in finding the answers to the questions, and asking for additional information that could help you piece together the puzzle. In this way, the seemingly impossible task partially returns to the person giving the task. Essentially, you have enlisted their help to complete the task.
- Assume you are a student and receive an assignment that has a clear deliverable, but vague instructions. You seek clarification from the instructor who provides additional information that helps you and other members of the class complete their assignment.

7. BATCH THE SIMPLE STUFF

You have many tasks to complete and a number of them are relatively small. The tasks relate to each other. You have a sense that you are not making much progress and you have a block of time to invest in completing small, simple tasks.

 If too much time is spent clearing small tasks, large tasks may suffer.

- The priority of small tasks may not let you batch them together.
- Small tasks may require input from others and not lend themselves to batching.
- Many small tasks can be similar to (or more complex than) a large task.
- + Smaller tasks take less time to complete.
- + Removing things from your list of things to do gives you a sense of accomplishment.
- Grouping similar small tasks into task groups may reduce the amount of total time required to complete them.

Therefore, when faced with many small tasks, the need to feel a sense of accomplishment, and an available block of time, batch these tasks together.

7.1 Commentary

You can precede this pattern by <u>JUST START</u> or <u>SEEK CLARIFICATION</u> if some of the tasks are vague. You can combine this pattern with <u>TASK JAR</u> if the tasks are not urgent or <u>DROP UNIMPORTANT TASKS</u> (see the resulting context).

Small tasks differ from large tasks, as they typically do not require much time investment. At the same time, they may appear on a person's list of things to do and may give you the sense that you are not making much progress. When you have many smaller tasks that require completion, it is sometimes best to batch them together and complete many of them in a short amount of time. This will give you a sense of progress and reduce the size of your list of things to do.

This particular pattern is in conflict with <u>TASK JAR</u>. It is important to understand when each is used. This pattern is useful when you have many small tasks and you have a block of available time to complete them. This is also effective when you have a block of related small tasks and you can gain some benefit by grouping them together. Use <u>TASK JAR</u> when you have non-urgent small tasks, you do not have a block of time to dedicate to these small tasks, or the small tasks do not have any affinity.

7.2 Resulting Context

Batching simple tasks helps you complete them more quickly. Use this pattern with FEEDBACK LOOP, SINGLE-TASK IMPORTANT ITEMS if the sum of the small tasks is important, PRIORITIZE so that you do the most important small tasks first, or DELEGATE if you can shift some of these tasks to others. Follow this pattern with PUT IT OFF for tasks that seem simple, but later require further thought or organization, SEEK CLARIFICATION for tasks that seem simple, but are vague (and remove them from the batch), DELEGATE for those tasks that others can do, and DROP UNIMPORTANT TASKS should some of the small tasks not require completion.

Perhaps the most harmful alternative resulting context for this pattern is if you decide to batch simple stuff instead of completing larger and more important tasks. Though you may gain some satisfaction in completing these smaller items, when a task is unimportant, you should consider using a TASK JAR instead.

7.3 Examples

- Assume you are a member of a volunteer organization. You have a number of tasks to complete for their spring fair. None of the tasks is complex and each requires only a small amount of time to complete. Since these tasks relate to the same subject, you decide to batch them together so that you can take advantage of the overall context and the resulting shorter start-up time for each individual task. When you complete them, you remove a significant block of tasks from your list of things to do.
- Assume you work for a company that uses email extensively. People are in the practice of requesting information through this medium on a regular basis. Each task is rather small, but when put together there is a lot of work to accomplish. Because they arrived by email, individuals expect a reply. Since each task is simple and resides in a similar domain (related to your job), you also decide to batch them together during the morning so that you can STRIKE WHEN YOU ARE HOT. This will clear these items from your list of things to do and gives you a sense of accomplishment early in the day.
- Assume you own a house and are preparing to get ready for spring. You have many large and small tasks (for example, mulching the flower garden, raking leaves left over from the fall, spreading fertilizer, etc.). Completing several small tasks such as mulching the flowerbeds and planting some annuals or perennials has an immediate impact on the look of your property and gives you a sense of accomplishment. You can then set aside CONTIGUOUS TIME BLOCKS for the larger and more complex tasks.

8. TASK JAR

You have many tasks to complete and some of them are relatively small, well known, and not urgent. You also have several larger tasks, which require larger blocks of time or are complex. You do not have a block of time to complete these small tasks, but there is time available between other more important or larger tasks.

- If you dedicate too much time to completing small tasks, large tasks may suffer.
- Stopping large tasks to complete other smaller tasks can cause both to take longer.
- Simpler tasks may take more time than is available between larger or more complex tasks.
- + Small tasks do not take a long time to complete.
- Removing items from your list of things to do gives you a sense of accomplishment.
- + Using the time between tasks to complete other tasks can free your mind temporarily before you begin the next larger or more complex task.
- + There is no advantage to doing small tasks together when they do not have any affinity.

Therefore, when faced with many small non-urgent tasks that do not have any affinity, the need to feel a sense of accomplishment, and no dedicated block of time to complete them, intersperse simple tasks throughout the day in between larger or more complex tasks.

8.1 Commentary

There should be no need to <u>SEEK CLARIFICATION</u> of any of these tasks after they are in the task jar, but <u>SEEK CLARIFICATION</u> may precede their placement in the jar. You can combine this with <u>BATCH THE SIMPLE STUFF</u> and/or <u>DROP UNIMPORTANT TASKS</u>. It is different from <u>BATCH THE SIMPLE STUFF</u>, however, because it implies that these small tasks are also never urgent while they are in the "iar".

Some households have a "job jar" in which pieces of paper listing non-urgent tasks are placed and selected by the members of the household for completion as they find time. This pattern is akin to that concept because the small non-urgent tasks are effectively set aside. When time becomes available, select a task from the "jar" and execute it. This allows for efficient processing of tasks in between larger tasks, in between tasks that are more important, or when you have some downtime. The primary difference between that concept and this pattern is that the tasks in the task jar may have an inherent or loose priority—to you or someone else—while they are in the jar.

Small and simple tasks differ from large or large complex tasks in that they do not require much time investment or forethought to complete them. By interspersing smaller tasks in between larger ones, you can continue to make progress on these small tasks even though you cannot dedicate a block of time to completing them. Additionally, completing a small task can give you a sense of accomplishment.

This pattern is in conflict with <u>BATCH THE SIMPLE STUFF</u>. Task Jar is useful when you have non-urgent small tasks, you do not have a block of time to dedicate to these small tasks, or the small tasks do not have any affinity. <u>BATCH THE SIMPLE STUFF</u> is useful when you have many small tasks that have subject-matter affinity, are either urgent or non-urgent, and you have a block of available time to complete them.

8.2 Resulting Context

Using a "task jar" allows you to intersperse small, well-known, non-urgent tasks between larger or more complex tasks. There should be no need to SEEK CLARIFICATION of any of these tasks after they are in the task jar, but SEEK CLARIFICATION may precede their placement in the jar (see commentary). Follow this pattern with PRIORITIZE so that you understand which non-urgent task to do first. You may also DELEGATE tasks that can be easily accomplished by others and DROP UNIMPORTANT TASKS if they have been in the jar for a long time.

The <u>Task Jar</u> suffers from the opposite problem from <u>Batch the Simple Stuff</u>—partially owing to their inherent conflict with each other. If you inadvertently place an important small task in the task jar, the resulting context may be pressure from the task giver. You may also have to scramble to complete such a task.

8.3 Examples

Assume you are a student. You have an assignment that has
many different components and lends itself to being broken
up into several large blocks of time. At the same time, you
have several smaller tasks for other classes that need to be
completed. These smaller tasks are not urgent (although
they may become so depending on how long they remain
undone). You decide to set the smaller tasks aside and work

- on them in between the larger and more complex tasks (perhaps using <u>CONTIGUOUS TIME BLOCKS</u>). You continue to progress on these non-urgent tasks while still giving priority (perhaps using <u>PRIORITIZE</u>) to the larger assignment.
- Assume that you have to work on several complex budget calculations as part of a rather large task. The task itself is not boring and is important. Unfortunately, it is also time consuming. At the same time, other smaller tasks are building up. Because you need a break every so often from the large task, you intersperse several smaller tasks in between the larger ones. In this way, you continue to make progress while keeping your mind relatively focused on the larger and more important task.
- Assume you have housework to do that includes doing the laundry, cleaning the bathrooms, and vacuuming the carpet. You also have to complete your tax return. The housework tasks are not urgent the floor is not that dirty and the laundry and bathroom tasks do not require dedicated time to complete. You intersperse the smaller housework tasks in between breaks from the larger, more complex tax return task. Thus, you continue to make progress on both while not sacrificing the importance of completing your tax return.

9. STRIKE WHEN YOU ARE HOT

You have a task to do and need to progress through it quickly or make significant progress. You have times of the day when you feel you are more productive – times when you are at your intellectual, emotional, or physical best. To make significant progress or complete the task, you feel that you need to be at your best to maintain your focus.

- Other tasks or outside influences may interfere with your "hot" time.
- "Hot" times can occur at bizarre hours (e.g. in the middle of the night) which, if used, can affect your performance afterward.
- Using your "hot" time to complete small tasks may or may not be the best use of that time.
- You may not be able to control the schedule of a task so that you complete it when you are hot.
- Just because you are at your mental best does not mean you will be able to concentrate.
- You may not know when your "hot" time is.
- + Everyone has a time of day where they are at their intellectual, emotional, and physical best.
- + Completing tasks when you are at your best can reduce the amount of time it takes to complete it.
- + When you are at your best, you may be more efficient.

Therefore, when you have a need to move quickly through many smaller tasks or make significant progress on larger tasks, take advantage of the time of day when you are most productive by striking when you are hot.

9.1 Commentary

It may be effective to precede this pattern with <u>PUT IT OFF</u> in some cases. You may also precede it with <u>PRIORITIZE</u> if you need to know which tasks to complete during your "hot" time. You

can combine this pattern with <u>CONTIGUOUS TIME BLOCKS</u> and <u>SINGLE-TASK IMPORTANT ITEMS</u> to enhance the effectiveness of using this pattern.

This pattern has its basis in our human biology. People seem to have times of day (not all the same) that they are better at completing tasks than others. For some, it is several different times a day. It has been suggested that the frequency could be as much as every 90-110 minutes [7]. The circadian rhythm is another such biological clock.

This pattern talks about when to perform a task versus which ones to perform. You can combine this pattern with just about any pattern in the busy person pattern language when higher productivity is required. So, when you need to do something quickly or need to make substantial progress on a project, take advantage of these hot times and strike.

It is possible that you do not know when you are at your best (intellectually, biologically, or otherwise). Understanding this requires a bit of self-examination and introspection. It has as much to do with your own perceptions of how and when you work best as it does your own physical reactions to your surroundings and habits – and it can change over time!

9.2 Resulting Context

Striking while you are at your intellectual, emotional, and physical best gives you the ability to perform a task more efficiently. Use this pattern with CONTIGUOUS TIME BLOCKS, SINGLE-TASK IMPORTANT ITEMS, OR BATCH THE SIMPLE STUFF. Follow this pattern with PRIORITIZE for follow-on work or DELEGATE if you find that the work is conducive to delegation.

There is the possibility that you may think you are at your physical and mental best, but are not. If you have convinced yourself you are at this peak, you still may find yourself unable to perform in a manner that you are accustomed or desire. If you PUT IT OFF prior to using this pattern thinking you would be "hot" later, you may have just introduced a delay to complete the task (inadvertently procrastinated).

9.3 Examples

- Assume you are a "morning person". A morning person feels at their intellectual best and is most productive in the morning. Assume you have a task to complete that you wish to complete quickly because either you have a deadline or you merely wish to remove a task (or tasks) from your list of things to do. By getting up early and striking when you are hot, you will be able to complete the task more efficiently.
- Assume you work for a company and have an important, complex task due. You have already <u>Put It Off</u> so you can organize your thoughts, but you now need to complete it as quickly and efficiently as possible because people are waiting on your input. Since you work best in the morning, you decide to use <u>Strike When You Are Hot</u> and <u>Single-Task Important Items</u> to complete the task.
- Assume you are a student and have a routine assignment that is due. You have all of the information you need and wish to complete the assignment as quickly as possible so that you can continue to the next assignment. You find that when you do these types of assignments, you are at your intellectual best at 1 AM. You decide to perform this task when you are "hot" intellectually. This makes the task go faster and

readies you for the next task (though you may be tired if you have an early class the next day).

10. FEEDBACK LOOP

You have a task and are unable to determine how long it will take to complete. You have the information you need to begin the task, but you believe there will be additional information requirements that may emerge as you perform the task. The task itself may be vague, but you do not require clarification. You feel that you need some knowledge of the task's parts to determine how long it will take to complete.

- Setting a target does not mean you will achieve it.
- You may not correctly estimate the duration of a task and waste more time having to stop the task and pick it up again after you assess your results.
- Completing a portion of the task may not give you any information about other pieces of the task.
- Unknown duration tasks can be disconcerting.
- + It is often easier to break tasks down into sub-tasks.
- + Gathering information about how long it takes you to complete a step can give you valuable information on how long it will take to complete the next step (or the entire task).
- + Completing a task in tight feedback cycles may improve the overall quality of the deliverable (see [8] for a software development implementation of this).

Therefore, when you are uncertain how long a task is going to take, set a target for how much you expect to complete by a certain time. By setting a target, you will give yourself a point in time where you can check your progress. When you reach the target, you can check the amount of work you completed and then adjust your timeline to reflect how long you are taking.

10.1 Commentary

JUST START may be the most logical pattern to precede this one. It might also seem logical to precede this pattern with SEEK CLARIFICATION, but one of the requirements to use this pattern is that you know generally what you need to do, but not necessarily how long. That pattern may be useful initially, however, if the task is initially vague. You can combine this with BATCH THE SIMPLE STUFF if you believe the amount of time to complete these tasks is uncertain.

This pattern uses the concept of gaining feedback from prior action times as a predictor of future action times. It is an interesting pattern because there are many situations where prior estimates become a predictor of future estimates. Doing this gives you a velocity that you can then use to determine how long follow-on tasks may take. This pattern works well with JUST START because that pattern also deals with tasks that are difficult to estimate.

You can see related versions of this pattern at work in other places beside those of the busy person. For example, agile software development (particularly Extreme Programming) uses initial estimates which are then validated to determine a development team's velocity [8]. The feedback gained from an initial estimate helps you determine future estimates more

accurately. This pattern is related to the software development pattern TIME ON TASK by Joe Bergin [9].

10.2 Resulting Context

Setting a target completion time for a task is a useful way to gain feedback on how long it is taking you to complete something. This pattern works well with most of the other time-based patterns such as <u>Contiguous Time Blocks</u> and <u>Single-Task Important Items</u>. Follow this pattern with any of the time-based patterns or <u>Prioritize</u> if you have to break down the task into sub-tasks. A little estimation goes a long way!

Setting a target, however, can have an unintended consequence: It can make a seemingly unimportant task more important because you have set a deadline. This can cause you to ignore important tasks because they do not have an immediate deadline.

10.3 Examples

- Assume that you work for a large company and you need to produce a financial budget for a project. You are clear what you have to do, but are unsure how long it will take you to complete it. You decide to break the larger task down into smaller pieces and make an educated guess that you will complete this first task by 3 PM. At 3 PM, you realize that the task will take you at least another hour, so you re-set the task to complete at 4 PM. You use this information as input to your next task estimate, which is more accurate. This allows you to estimate that you can complete the entire assignment by noon the following day.
- Assume you are a member of a team of students that wish to create a pattern language in pattern form. The team understands the assignment, but is unsure how long it will take to complete it. The team sets a target of one week to have the first two patterns written. After the first two patterns are complete, they estimate the time it will take to complete the next two patterns based upon the feedback. Since the assignment requires a fair amount of mental organization, they use <u>PUT IT OFF</u> to organize their thoughts.
- Assume you are performing yard work and need to fertilize your lawn. You have never fertilized it before and are not sure how long it will take. The time it will take to complete is dependent upon the size of your property, the amount of times you have to re-fill your spreader, and how fast you can walk. To understand how long it might take, you set a target to complete only your front lawn. Using this information, you determine how long it may take to fertilize your entire lawn.

11. PRIORITIZE

You have many tasks to complete. These tasks can be large and complex or small and simple. You have the information you need to decide which tasks are more important. Each task has a different level of importance to you or someone for whom you are completing it.

- Sometimes, seemingly unimportant tasks are important.
- Often tasks originate from many different people. It is difficult to obtain general agreement from them about

- the relative important of all of your tasks. You have to be the judge.
- Sometimes the relationship between someone else's goals and a task you are completing is not obvious.
- Prioritizing your work may cause you to focus on things you think are important versus what others think are important.
- + A task's level of importance is somewhat dependent upon its proximity to completion (when it is due).
- + Tasks typically have different levels of importance.
- Putting the most important tasks first ensures that high value tasks are given more attention than low value tasks.

Therefore, when you have several tasks with different levels of importance, prioritize the work from the most important task to the least important task. When you prioritize tasks, consider the importance of the person requesting the task; the due date of the task; the amount of time required to do the task; the relationship between the task and your goals; and the relationship between the task and the requestor's goals. By ordering the tasks, you ensure that you do the most important tasks first.

11.1 Commentary

You may combine this pattern with <u>BATCH THE SIMPLE STUFF</u>, <u>TASK JAR</u>, <u>STRIKE WHEN YOU ARE HOT</u>, and <u>FEEDBACK LOOP</u>.

Understanding what is important and each task's relative importance is a key input to this pattern. It may seem logical to order your work from highest to lowest priority, but you must take care because priorities can easily change. Additionally, a task's importance increases as it nears its due date, so you must not set a list of priorities and never address it again. As soon as something changes (a new task is received, a prior task is completed, a goal is not met, etc.), the prioritization should be readdressed.

Do not confuse importance with urgency. Urgency can make a task more important than it might otherwise be, but important tasks do not necessarily have to be urgent. Prioritization should consider this.

In a work environment, you can obtain a supervisor's assistance in setting priorities. At home, a meeting with your spouse and children can be useful in setting priorities for tasks and projects.

11.2 Resulting Context

Prioritizing work is a prerequisite pattern for a busy person. Virtually all of the other patterns in the busy person pattern language can follow work prioritization. If prioritizing the work becomes a task itself, then the other patterns in this language can recursively support that activity. Follow this pattern with DROP UNIMPORTANT TASKS for a task that is always at the bottom of your priority list.

An alternative resulting context can occur if you incorrectly prioritize tasks. Prioritization is supposed to place the most important tasks at the top of your list of things to do. If done improperly, you may address unimportant tasks (or less important tasks) first.

11.3 Examples

- Assume you are having an extremely busy day. You have many competing demands on your time and receive several new tasks. To ensure you are working on the most important tasks first, you prioritize the work. You may also create a TASK JAR for those tasks that are not currently urgent.
- Assume you are looking to ready your home and yard for spring. The weather is threatening rain and snow and you want to be sure you complete the most important items first. You prioritize the work so that you fertilize and rake first before you clean the garage because once it begins to rain, you will not be able to perform those activities.
- Assume you have a paper to complete and a birthday party to go to for your Aunt Betty who is turning 95. The paper is due in three days, but Aunt Betty will only turn 95 once and your spouse has told you it is important that you be there. You prioritize the two tasks to maintain your marital harmony and work on the paper in the evening.

12. DELEGATE

You have a task to do for which you may not have the specific domain expertise and do not have the time to complete. You have people reporting to you or who are willing to help you complete the task. Others may be able to perform the task equal to or better than you may.

- People may resent you dumping your work on them.
- Delegating an important task involves a measure of risk.
- People may not complete the task within the quality and time parameters you set. However, it may be GOOD ENOUGH.
- You can spend more time explaining a task to someone than you would spend doing the task yourself.
- + You cannot complete everything yourself.
- + People are usually willing to help.
- + When you are busy, you cannot complete every task assigned to you and may need to DROP UNIMPORTANT TASKS.

Therefore, when you are faced with a task that you are responsible to complete, but do not have specific domain expertise or time, but either have people reporting to you or have people that do have time, delegate the task. Never put off for tomorrow what you can have someone else do today.

12.1 Commentary

Delegating work usually has a hierarchical relationship to it (e.g. a boss delegating to an employee). Although this pattern includes that relationship, it does not have to be so. You can also delegate to a co-worker, spouse, offspring, parents, etc. as the case may be. Being able to know when to delegate is almost as important as delegating itself. For example, should you delegate an important task? The answer is "yes" if someone else is the best person to do the job. You might also delegate important tasks if you do not have the time to complete the task in a satisfactory manner. You can always preview the results (also see GOOD ENOUGH for an alternative). What should you do with unimportant tasks? You should either delegate or DROP

<u>UNIMPORTANT TASKS</u>. Put non-urgent tasks for which you possess domain expertise or you cannot delegate in a <u>TASK JAR</u>.

Given the right kind of assignment, delegation can teach a subordinate, peer, or novice something they are not prepared to do. Their output may not be at the same level as yours, but it may be GOOD ENOUGH.

12.2 Resulting Context

You may combine this pattern with BATCH THE SIMPLE STUFF, TASK JAR, STRIKE WHEN YOU ARE HOT, and DROP UNIMPORTANT TASKS. Though you cannot delegate every task, if you find you do not have the domain expertise or people are willing to assume tasks on your behalf delegation may be possible. Though this essentially moves the completion of a task from your list of things to do to another's, you most likely will need to interact with that person if they ask questions or seek clarification. If it is an important task, you may wish to follow with SINGLE-TASK IMPORTANT ITEMS OF CONTIGUOUS TIME BLOCKS to ensure there is a common understanding of the task.

Delegation is not without its pitfalls. If you delegate to someone you think has a skill, but does not, you could be in for a rude surprise without enough time to re-do the task. Additionally, delegation has a management component associated with it. Though you are not doing the task, you need to be sure you allocate time in your schedule to ensure the task is progressing.

12.3 Examples

- Assume you are a manager and you receive several items each day that require a response. If you responded to each of these requests, you would have no time to eat or sleep. Therefore, you delegate those tasks to staff members who have domain expertise and time to complete the task while you focus on those tasks that require your expertise.
- Assume you are working late and have an errand you need to run – you wish to purchase a birthday gift for a friend. The store you wish to go to closes before you will leave work. Because you cannot both work late and get the gift, you ask their spouse to pick out a gift for your friend—delegating the responsibility for getting the gift. (Be careful not to do this too much).
- Assume you are getting ready to do spring-cleaning. You
 have several family members who purport to know what
 needs to be done, but are not sure where to start. You
 delegate those tasks that they are capable of doing while
 assuming tasks that require your expertise.

13. DROP UNIMPORTANT TASKS

You have several tasks you need to complete. Some of these tasks are unimportant and may never need action. The task may have been on the bottom of your list of things to do for a very long time and may no longer be required. In addition, you may have had past experience with the requestor and can judge whether it is truly required or not.

- History is not always a guide as to whether someone will need the results of a task.
- Tasks that are unimportant to you may be very important to someone else.

- A seemingly unimportant task may be a test to see if you can handle more important tasks.
- Understanding busywork is an important component to determining whether to drop a task.
- + Some tasks are just not worth doing (so do not do them).

Therefore, when you receive an unimportant task whose completion will make no difference to anyone, drop the task. This is not an opportunity for slacking. Use this when you are overwhelmed and you are sure that the task will make no difference to anyone. This often requires very detailed knowledge of another person's needs.

13.1 Commentary

This can be a somewhat dangerous pattern if not used properly. The key is to remove work from your list of things to do that is truly unnecessary to complete. Good candidates for this pattern are tasks whose due dates continue to move out each time you have not completed them. A "rule of three" can be a good policy—if you miss a date three times and there is no consequence, you can probably drop the task. If there is no urgency to complete it, the task most likely will not need to be completed (also see GOOD ENOUGH for an alternative).

13.2 Resulting Context

You may combine this pattern with <u>BATCH THE SIMPLE STUFF</u> and <u>TASK JAR</u>. This pattern can work with <u>TASK JAR</u> to reduce the number of tasks you have to complete. It can work with <u>SEEK CLARIFICATION</u> to test the waters about the task's overall importance. Sometimes, rather than dropping a task, it is better to <u>DELEGATE</u> it.

This pattern carries a measure of risk with it. If you think a task is unimportant, but it is not so, you could be in a bit of trouble – especially if it is a long task as you may not be able to recover once you subsequently identify it as important. Again, you can mitigate this risk through using <u>Seek Clarification</u> or <u>Delegate</u>.

13.3 Examples

- Assume you work for a large institution and received a
 resource request from an unreliable source. The source
 never asks about the work he gives and when you send him
 your output, he never seems to use it for anything. You
 PRIORITIZE the work and it continuously falls to the bottom.
 After moving the task's due date several times, you
 determine you do not need to complete it and remove it from
 your list of things to do.
- Assume your spouse wishes for you to clean the garage. You have successfully dodged this task for several weekends and he or she has not mentioned it. You drop the task since you do not intend to complete it anyway. (Note: Be careful, a request like this may reappear!)
- Assume you work for a large company and were asked to reassess your staffing needs. You are anticipating new work and think you might not have enough people. The task was not truly important (yet) because the new work was undefined. It turns out the additional work is not going to be required, so you drop the task since it is now unimportant.

14. GOOD ENOUGH

Note: This pattern was inspired by Linda Rising's Good Enough pattern for product development [1].

The best is the enemy of the good. ¹ Voltaire, Dictionnaire Philosophique. Women, 1694-1778

You have several tasks you need to complete. You know that not everything that you do has to be perfect. You recognize that the level of quality for a task can be reduced, and still satisfy the requestor. You may be spending time on things that add little value

- You may feel unsettled by not producing your best work
- Some people want to produce a perfect product every time.
- + Time spent perfecting something that does not require perfection is time that is lost to completing other tasks.
- The requestor may expect perfect output even if the task does not warrant it.

Therefore, reduce the level of quality to a level that will satisfy the requestor and meet their expectations. You can then complete the task more quickly. That is, you work on the task only until it is good enough. Different task outputs require different levels of perfection depending on some objective criteria and the requestors' expectations. If a task does not require a high level of precision or quality, it may be possible to put just enough effort into it to complete it.

14.1 Commentary

The pursuit of perfection is an enemy of the busy person as harmful as procrastination. The output from a task is good enough when it satisfies the requestor and has not consumed more time or effort than necessary. You have to be careful how you apply this pattern. It should usually precede and follow SEEK CLARIFICATION in an iterative fashion because you need to have a full understanding about what is required. This also implies a deeper understanding of the task. You will need to know what will happen to the output, the importance of the output, and whether the output you produce is part of a larger whole where minor errors will not make a difference. You also need to stay close to the requestor to ensure they are not disappointed with your output.

14.2 Resulting Context

Completing tasks so that they are "good enough" and satisfy the requestor allows you to devote time to those tasks that truly do need an element of perfection. You may also use it with DELEGATE if you believe that someone else may be able to complete it and produce a higher level of quality than you are willing to give a task or DROP UNIMPORTANT TASKS if the task does not need to be completed. You can combine it with

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¹ Le mieux est l'ennemi du bien.

<u>DELEGATE</u> if you have a subordinate or individual you can pass tasks to who has the general knowledge to complete it. Follow this pattern with <u>SEEK CLARIFICATION</u> if you think your work is good enough, but are unsure whether it will satisfy the requestor. (Note: this is a great way to identify what truly is good enough).

Be careful when implementing this pattern. If you do not understand the importance the requestor is placing on your output, you will disappoint them. It is also possible that what you believe is "good enough" will not be good enough. This can cause you to rework the output of a task and take additional time from you to get it right.

14.3 Examples

- Assume you are an engineer who has to plot the course of a
 Mars probe for NASA. Large mid-course corrections are not
 possible during a flight because there is limited fuel. You
 must produce a calculation that as close to perfect as possible
 to ensure that the probe will reach Mars. In this case, "good
 enough" is perfect!
- Assume that you have a large lawn you need to mow and trim. You will be going on vacation for a week and no one will be visiting. Your mowing will probably be good enough if you skip some of the less obvious spots to allow extra time to pack for your trip.
- Assume you have a number of high priority tasks to perform and you have used <u>PRIORITIZE</u> to understand in what order you should do them. One of these tasks is to produce a weekly status report that you know your boss does not read since he/she talks to you weekly. Updating only the significant changes from the prior week should be good enough and allow you to complete higher priority tasks.

15. OTHER POTENTIAL PATTERNS

Following is a list of potential patterns that we have identified, but have not detailed in pattern form. The list is complementary to the thirteen patterns presented in this paper and may be the subject of a future paper. The names and short descriptions are preliminary, but do express the idea of the pattern.

- Extra Time. This pattern is about contingency planning –
 ensuring that there is some breathing room to complete a task
 when the inevitable happens and things go wrong.
- Time Boxing. This pattern is similar to what you might do
 in a feedback loop, but takes it a little further. It is
 analogous to iterative development in that you specify the

- amount of time you are going to take and the scope is flexible.
- Categorize. A way to sort tasks. We envision this pattern working with <u>BATCH THE SIMPLE STUFF</u>.

16. APPENDIX A: PATTERN LANGUAGE REFERENCE DIAGRAM

The following diagram illustrates how the Busy Person Pattern Language patterns work together and influence each other.

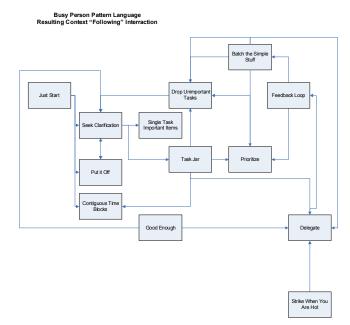


Figure 1. "Busy Person Pattern" resulting context. This diagram shows the "following" relationship for each pattern in the resulting context.

17. APPENDIX B: PATTERN CROSS REFERENCE

The following table contains a cross reference for the Busy Person Patterns. For each pattern name there is a list of patterns to use prior to, with, or following for both the context and resulting context. Patterns in the commentary section appear in the last column and may repeat those in the other columns.

Table 1. Pattern cross-reference.

	Context		Resulting Context		
Pattern Name	Prior	With	With	Following	Commentary, Examples, and External
Just Start				Seek Clarification	Put It Off
				Put It Off	Feedback Loop
				Feedback Loop	Seek Clarification
				Prioritize	
Contiguous	Just Start	Single-Task Important Items	Single-Task Important Items	Put It Off	Feedback Loop
Time Blocks	Feedback Loop	Seek Clarification	Strike When You Are Hot		

	Context		Resulting Context]
Pattern Name	Prior	With	With	Following	Commentary, Examples, and External
		Strike When You Are Hot Feedback Loop Delegate	Put It Off		
Single-Task Important Items	Just Start	Contiguous Time Blocks Seek Clarification Strike When You Are Hot Feedback Loop Delegate	Strike When You Are Hot Contiguous Time Blocks		
Put It Off	Just Start Seek Clarification	Contiguous Time Blocks Batch the Simple Stuff Strike When You Are Hot	Strike When You Are Hot Single-Task Important Items	Seek Clarification	Just Start Strike When You Are Hot
Seek Clarification	Just Start Feedback Loop	Put It Off Batch the Simple Stuff Task Jar Drop Unimportant Tasks		Contiguous Time Blocks Single-Task Important Items Put It Off	Ask For Help [3]
Batch the Simple Stuff	Just Start Seek Clarification	Task Jar Drop Unimportant Tasks	Feedback Loop Single-Task Important Items Prioritize Delegate	Put It Off Seek Clarification Delegate Drop Unimportant Tasks	Task Jar Strike When You Are Hot Contiguous Time Blocks
Task Jar	Seek Clarification	Batch the Simple Stuff Drop Unimportant Tasks		Prioritize Delegate Drop Unimportant Tasks	Batch the Simple Stuff Contiguous Time Blocks
Strike When You Are Hot	Put It Off Prioritize	Contiguous Time Blocks Single-Task Important Items	Contiguous Time Blocks Single-Task Important Items Batch the Simple Stuff	Prioritize Delegate	Put It Off' Strike When You Are Hot Single-Task Important Items
Feedback Loop	Just Start Seek Clarification	Batch the Simple Stuff	Contiguous Time Blocks Single-Task Important Items	Prioritize	Just Start Put It Off Time On Task [9]
Prioritize	Just Start	Batch the Simple Stuff Task Jar Strike When You Are Hot Feedback Loop		All	
Delegate		Batch the Simple Stuff Task Jar Strike When You Are Hot Drop Unimportant Tasks		Single-Task Important Items Contiguous Time Blocks	Drop Unimportant Tasks Task Jar Good Enough [1]
Good Enough	Seek Clarification	Delegate Drop Unimportant Tasks	Delegate	Seek Clarification Drop Unimportant Tasks	Prioritize

18. APPENDIX C: QUICK ACCESS TABLE

The following table is a cross reference between an objective (left hand side) and the pattern or patterns you may wish to use to achieve the objective (right hand side).

Table 2. Quick access table.

Objective	Pattern(s)	
You have a vague task.	Just Start, Seek Clarification, Feedback Loop	
You have a complex	Contiguous Time Blocks Put It Off,	

Objective	Pattern(s)		
task.	Strike When You Are Hot		
You have an important task.	Contiguous Time Blocks, Single- Task Important Items, Put It Off		
You have many small tasks.	Batch the Simple Stuff, Task Jar		
You need to make progress.	Batch the Simple Stuff, Task Jar, Strike When You Are Hot, Delegate, Drop Unimportant Tasks		
You do not know which task to work on first	Prioritize		
You have unimportant tasks	Prioritize, Delegate, Drop Unimportant Tasks, Good Enough		

19. ABOUT THE AUTHORS

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21. REFERENCES

- [1] Rising, L., "Good Enough Pattern," 2005.
- [2] Coplien, J. O. and Harrison, N. B., Organizational Patterns of Agile Software Development. Upper Saddle River, NJ: Pearson Prentice Hall, 2005.
- [3] Manns, M. L. and Rising, L., *Fearless Change*. Boston: Addison-Wesley Pearson Education, Inc, 2005.
- [4] Weir, C. and Noble, J., "Process Patterns for Personal Practice," in *European Pattern Language of Programming* 1999 (EUROPLOP'99), 1999.
- [5] Mark, G., Gonzalez, V. M., and Harris, J., "No Task Left Behind? Examining the Nature of Fragmented Work," in Proceedings of the SIGCHI Conference on Human Factors in Computing Systems (CHI'05), Portland, Oregon, USA, 2005, pp. 321-330.
- [6] Dijksterhuis, A., Bos, M. W., Nordgren, L. F., and Baaren, R. B. v., "On Making the Right Choice: The Deliberation-Without-Attention Effect," *Science*, vol. 311, pp. 1005-1007, February 17, 2006 2006.
- [7] Jenson, E., Teaching with the Brain in Mind, 2nd ed.: Association for Supervision & Curriculum Development, 2005
- [8] Beck, K. and Andres, C., Extreme Programming Explained: Embrace Change, 2nd ed. Boston: Addison-Wesley, 2005.
- [9] Bergin, J., "Coding at the Lowest Level: Coding Patterns for Java Beginners." vol. 2006, 2001.