Tool Warehouse Rentals

# Project Overview

This project aims to build a platform where the tool warehouse company and the customers can manage and check out tools.

People pay a monthly fee to have access to tools that they can check out and use. The platform we aim to create will be able to keep track of who is using the tools, how often the specific tool is used and whether or not the tool needs to be replaced. Customers other should have the ability to make a list of tools they need and the system should be able to tell if all the tools are available and if not the application will be able to email the customer when the “missing” tool is available.

# Team Organization

The four of us have had coding experience but we haven’t made anything on this “large” of scale before. We are looking at this as a learning experience and a chance to try new things. When it comes to who does what we will try to distribute the workload evenly as we all have somewhat similar skills. Once coding starts and we start to gain experience in our niches of the project. We will start to rely on each other’s knowledge of the different parts of the project.

# Software Development Process

The development will be broken up into four phases. Each phase will be a like a Sprint. The first sprint will revolve around gathering information about the product and finding the needs of the customer. Once the requirements are found we will organize the requirements in a way that we do the most important things first and give priority to things that are required to do before another part of the project can be done. The second phase will be where the coding happens. This phase is when the product will be built. We will try to build as much of the program as possible to make sure it works so it is ready for phase 3. The third phase will be where the testing, debugging and optimizing the user experience will take place. We have a Trello account that has a list of all the requirements for the current phase. An individual can check out a requirement to show that it is being worked on. When the thing is made the requirements can be moved to the done list.

We will use Unified Modeling Language (UML) to document user goals, structural concepts, component interactions, and behaviors.

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| **Phase** | **Iteration** |
| 1. | Phase 1 - Requirements Capture |
| 2. | Phase 2 - Analysis, Architectural, UI, and DB Design |
| 3 | Phase 3 - Implementation, and Unit Testing |
| 4 | Phase 4 – Presenting the Project |

# Risk Analysis

-We are planning on using Amazon Web Services (AWS) to host our website. We chose AWS because it has a free tier account that we could use to host our website for free. However if we use our website too much we will be charged. Our goal is to just have AWS host our website for free.

-We are using to Spring to host our website database. None of us on our team has used Spring before. We are using Java to code our database and we learned that Spring is like Django but works better with Java. Our team has used Django before and we are hoping Spring is similar to Django.

# Communication policies, procedures, and tools

We as a group will meet at least twice a week in person to discuss what is happening with the project. There is also a slack channel that is used to communicate and ask questions remotely. All files needed should be pushed to a GitHub repository. If unsure of what to work on next, a Trello account has been made with a list of “TODO’s”, things that are currently being worked on, and things that are done. We need to make sure the Github and Trello are being updated so everyone knows the progress being made. We have decided to use Java, Python, and C# as our go to programming languages. We will use Spring to run our web application and use Amazon web services to host our web application.

# Configuration Management

See the README.md in the Git repository.