Augmented Reality Game

Project Management Plan

COP 4331C, Fall, 2015

Team Name: Project Pals

Team Members:

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| --- | --- | --- | --- |
| Version | Date | Who | Comment |
| V0.0 | 09/17/15 | Connor Heckman | Original ProjManag |
| V1.0 | 09/17/15 | Eric Peralli | Fixed Formatting Errors |

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**Project Overview**

Team Project Pals is creating an action based augmented reality application for Android, complete with networking between players, and a high emphasis on player customization.

**Reference Documents**

* [Concept of Operations](https://github.com/ericmp/Augmented-Reality-Mobile-Application/blob/master/Webpages/CONOPS.mht)

**Applicable Standards**

* Coding Standard: [Java Google Coding Standard](https://google.github.io/styleguide/javaguide.html)
* Document Standard:
* Artifact Standard:

**Project Team Organization**

Team Project Pals consists of three people, who share equal responsibility for all facets of the project. However, each member has a designated field that they specialize in, providing oversight for each branch of the project. Eric Peralli is our software development specialist who will manage edits to the source code. Connor Heckman is our web design specialist who manages the team’s website and organization of the documentation. Clayton Cuteri is the documentation specialist who drafts and formats all aspects of the team’s documentation. Our team meets twice a week in person and communicates via phone messaging and email.

**Deliverables**

|  |  |
| --- | --- |
| **Artifact** | **Due Date** |
| Meeting Minutes | Weekly |
| Individual Logs | 12/3/15 |
| Group Project Management Reports | Weekly |
| ConOps | 9/18/15 |
| Project Plan | 9/18/15 |
| SRS | 10/8/15 |
| High-Level Design | 10/29/15 |
| Detailed Design | 10/29/15 |
| Test Plan | 10/8/15 |
| User's Manual | 12/3/15 |
| Final Test Results | 12/3/15 |
| Source, Executable, Build Instructions | 12/3/15 |
| Project Legacy | 12/3/15 |

**Software Life Cycle Process**

Team Project Pals decided to use the Waterfall Software Development Method because our requirements are clearly defined, we have prior experience with the technology being used, and the entire team can focus on one development phase at a time.

**Tools and Computing Environment**

* Project Platform: Android
* Programming Language: Java and XML
* IDE and Libraries: IntelliJ IDEA, Android 5.0.1 (API 21)
* Compiler: Javac

**Configuration Manager**

* Source code is stored via GitHub.com
* Source code is updated using Git
* Updates to documentation and made via GitHub.com
* Online documentation is stored via Wordpress

**Quality Assurance**

Source code must be thoroughly commented, as well as reviewed and approved by each team member before being pushed. Team members must notify remaining members before updating online documentation. Deliverables must be completed and reviewed by all team members in person before submission.

**Risk Management**

**Software:**

- Some team members are unfamiliar with GUI operations in Java. To remedy this, during the requirement gathering and analysis phase, these team members will review Java GUI fundamentals via online lessons and tutorials.

- If there is an error in the source code that is missed by peer review, Git can be used to revert the changes that were pushed.

**Scheduling:**

- Group meetings are held at a fixed time and location every week, but a group member can miss one due to emergencies and prior commitments. If this happens, the absentee member must schedule a makeup meeting with the team to review the minutes of the prior meeting.

**Documentation:**

- In case of server crashes or connectivity issues, all online documentation is stored via GitHub and local hard drives.

**Table of Work Packages, Time Estimates, and Assignments**

|  |  |  |
| --- | --- | --- |
| Document Drafting | 2 Hours per Week | Clayton Cuteri |
| Document Review | 2 Hours per Week | Clayton Cuteri  Eric Peralli  Connor Heckman |
| Deliverable Quality Assurance | 2 Hours per Week | Clayton Cuteri  Eric Peralli  Conner Heckman |

|  |  |  |
| --- | --- | --- |
| Software Development | 70 Hours | Eric Peralli  Clayton Cuteri  Connor Heckman |
| Basic Gameplay | 15 Hours | Eric Peralli |
| GUI Design | 15 Hours | Clayton Cuteri  Connor Heckman |
| Networking | 20 Hours | Eric Peralli |
| Theme Visuals | 20 Hours | Eric Peralli  Clayton Cuteri  Connor Heckman |

**PERT Chart**

**Technical Project Metrics**

We will consider the Require Gathering and Analysis phase complete when we have completed the first version of the Concept of Operations, Project Management Plan, and Software Requirement Specification deliverables. We will consider the System Design phase complete when we have finished the first version of the Test Plan and High Level Design deliverables. We will consider the Implementation Phase complete when we have finished the first version of the Detailed Design and Source Code Deliverables. We will consider the Testing Phase complete when we have received the Test Results. We will consider the Development of System phase complete when we have finished the first version of the User’s Manual. The Maintenance Phase of the Waterfall Software Development Method is not applicable to this project.

**Plan for Tracking, Control, and Reporting of Progress**

At the end of each weekly meeting, team members will compile an agenda for the next in-person meeting. All documentation and source code is available to edit and review online via Git and GitHub, provided the team member doing the editing has notified the rest of their team beforehand. All changes made will be noted in version control. Time will be set aside before all in-person meetings so that the team can discuss issues, confusions, or risks incurred during the week.