Process Plan Document

1. Introduction

1.1 Our Idea

The game software will allow users to create and join contests that utilize Global Positioning System (GPS) location to create and participate in game sessions that depend on the physical environment.

1.2 Rules and Parameters

- 2 teams of equal length compete to capture and hold the most bases within a specific time frame.
- Teams begin from a centralized location, and bases generate within some radius around the location
- Every time a player enters a base, the server checks how many players have that as their most recent base, if the number surpasses the opponents and that value must be greater than and not just equal to the opponent's value, then it will change the ownership of the base, giving a point to who conquered it and taking away from the team who previously owned it.
    - Ex: Opposing team previously had 1 player on a base, to capture it, you would need a minimum of 2 players to be on the base at the same time to capture that base
- At time end, whoever has most bases wins
- You do not need to stay on a base to hold it

1.3 Definitions and Acronyms

GPS - Global Positioning System
Lead - Leader
UI - User Interface
UX - User Experience
GUI - Graphical User Interface

1.4 Project Scope

The project scope is to provide an account that will be used to participate in games, design a game scenario given a set of variables such as player count and location, track user movements and share data output and input between users using locations services, and designate a winner at the culmination of the game. Location services themselves are out of the scope of this project.

2. Process Description

2.1 Project Lifecycle

The project lifestyle will be a derivative of the waterfall method, implementing the continuous, repetitive prototyping and refinement of agile development. In specifics, we will have a modified implementation phase separating the server and client side implementations to create many, continuously refined prototypes with unit testing for all changes to ensure that we have two functional halves at the end of the implementation phase to go into full project testing.

2.2 Process Activities

Process description as a set of activities; for each activity provide the following:
Activity Name
Activity Description
Input criteria (activity inputs and how you know that they have sufficient quality)
Output criteria (deliverable document description and how you know it has been completed satisfactorily)

Documentation	Documentation on the project including all of the requirements for the project and the descriptions	None	Project documentation, checked, discussed and verified by group members
Analysis and Design	Layout of the architecture and implementation schedule as described in the documentation phase	Documentation, verified above.	Architecture and project framework with team resources, checked by both the project manager and development lead
Implementation(Server and Client in Parallel)	Coding implementation of the Server and Client architectures	Architecture, verified above.	Incrementally more refined prototype, verified in next phase.
Unit Testing	Incrementally testing the code generated in the Implementation phase	Prototype code	Tested and verified code, is checked by testing many use cases.
Integration Testing	Tests the integration	Full unit-tested parts	Finished project,

	of the Server and Client components		tested until verified

3. Roles

3.1 Team member names

Reno Sarge, Michael Shliselberg, Patrick Lowry, Daniel Bergman, and Jordan Kaplan

3.2 Roles Table

Roles	Short Description	Team Member
Project Manager	Team leader and builds architecture for the project	Daniel Bergman
Client Lead	Coding the client side	Daniel Bergman
Development Lead	Manager for all programming related tasks	Michael Shliselberg
Server Lead	Coding the server side	Michael Shliselberg
Testing Lead	Integration testing between client and server code	Patrick Lowry
UI Lead	Coding the user interface	Patrick Lowry
Database Lead	Creating the database	Reno Sarge
UI Sub-Lead	Testing and documenting for user interface code	Reno Sarge
UX/Design Lead	Designing the user interface	Reno Sarge
Server Sub-Lead	Testing and documenting for server code	Reno Sarge
Client Sub-Lead	Testing and documenting for client code	Jordan Kaplan
Documentation Lead	Creating documents and presentations	Jordan Kaplan
Requirement Lead	Keeping track of progress and that requirements are fulfilled	Jordan Kaplan

4. Estimates

4.1 Effort Estimate

Team Member	Hours/Week

Daniel Bergman	12
Jordan Kaplan	8
Michael Shliselberg	8
Patrick Lowry	9
Reno Sarge	5
Total Expected Man-Hours:	420

Lines of code: total number of lines of source code you expect to have in your final product
~7000 Lines of Code
Defects: total number of defects you expect to find while testing your code
36-40 defects

4.2 Schedule
Provide the estimated schedule for this project in terms of a table. The table should include columns for a Task Name/ID, Task Description, a Start Date, an End Date, any dependent tasks, and the required roles involved to complete the task.

#	Task Name	Description	Start	End	Dependencies	Roles
1	Framework	Create a basic backbone of modules for a working prototype	9/26/16	10/9/16	None	Development Lead, Server/Client Development Teams
2	Restrictions Document	Create the Restrictions Documents	9/27/16	10/3/16	None	Document Lead, Restrictions Lead
3	GUI Framework	Create a basic user interface model	9/28/16	10/9/16	None	UI Design Lead, UI Dev Team
4	Game Creation/Manipulation	Allow for creation and altering of base game/finding games	10/9/16	10/16/16	1	
5	Team Implementation	Create Implementation for team	10/16/16	10/23/16	1,3	Development Lead, Server/Client Development Teams

		modules/choosing teams				
6	Scoreboard Implementation	Implement modules for score keeping and printing	10/23/16	10/30/16	1,3,4	Development Lead, Server/Client Development Teams
7	Networking Implementation	Allow for network connections between server and client	10/30/16	11/6/16	1,3	Development Lead, Server/Client Development Teams
8	GUI	Complete full GUI	9/28/16	11/6/16	2	UI Design Lead, UI Development Team
9	Testing	Test full program & interactions	11/6/16	12/14/16	1,2,3,4,5,6,7	Testing Lead, Development Team