

Software Project Plan for



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1. Overview

The board game King Of Tokyo does not currently have a digital platform. Therefore, Galactic Takeover is a solution to allow players to access it on mobile devices. This application also puts a unique twist on the game. Instead of monsters invading Tokyo, the application version will feature aliens taking over a newly discovered planet. A mobile application based off this board game will surely attract the attention of its players as well as a new audience who favors playing games apps. The simplicity of this game will also captivate users of all ages. Additionally, It will be a low cost application to develop within four months.

2. Goals and Scope

2.1 Project Goals

| Project Goal | Priority | Comment/Description/Reference |
|--|----------|--|
| Functional Goals: | | |
| Must complete project by 12/3/2019 | | In order to ensure our quality of grades for our finals, this project will be completed in a timely manner in order to better prepare for other classes as well. |
| Must have four Software Engineers to work on the project | | To ensure the software is completed in a timely manner. |
| Business Goals: | | |
| Cost for development will be less than or equal to \$100 | | The cost to put the application on the App Store will be \$99. |
| Application will have advertisements to accrue revenue | | Will enforce that the ads are family friendly |

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| Technological Goals: | | |
| All engineers will have MacBooks to develop using Xcode | | Must develop on Xcode to be able to submit application on the App Store. |
| Quality Goals: | | |
| Application will be 85% bug free at the time of roll-out on the App Store | | First-time Swift developers will try their best and utilize their resources to deliver the best quality app. |
| Constraints: | | |
| Application will run on iOS devices with version 13 or later | | Latest version of iOS |

2.2 Project Scope

2.2.1 Included

This project will include the Galactic Takeover mobile application for iOS devices.

2.2.2 Excluded

This project will exclude online support.

3. Organization

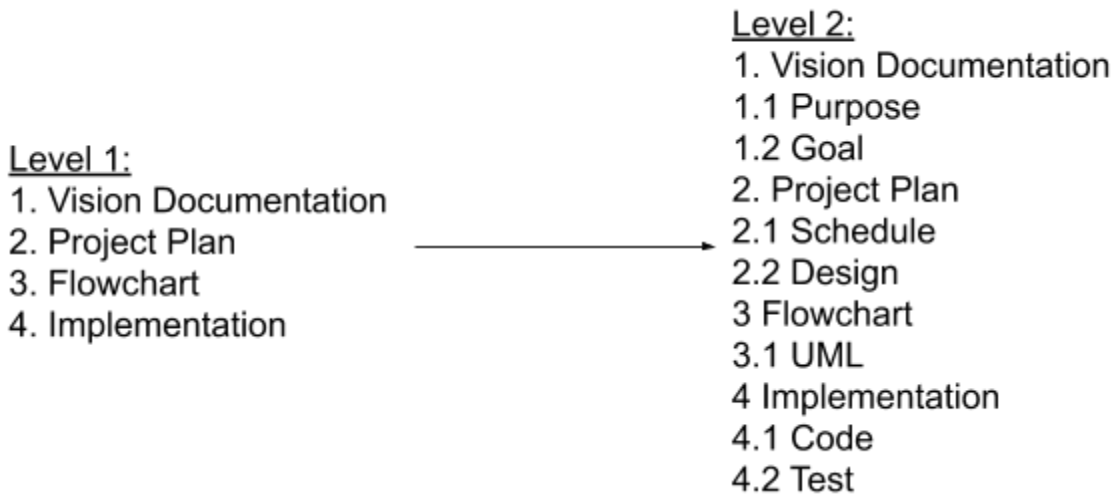
3.1 Project Team

| Name | Role | Responsibilities |
|---------------|---------------------------------------|--|
| Rachel Bright | Test Engineer | Design and run unit tests. Collaborate with team to ensure quality |
| Justin Reid | UI/UX Design | Design layout |
| Mayra Sanchez | Graphic Designer/ Front End Developer | Design art components that will be utilized throughout the |

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| | | game. Code user interface |
| John So | Backend Developer | Implement classes and methods for application. Allocate storage and memory |

4. Schedule and Budget

4.1 Work Breakdown Structure



4.2 Schedule and Milestones

| Milestones | Description | Planned Date |
|----------------------|--|----------------------|
| Vision Documentation | Define the purpose of the program. | September 20th, 2019 |
| Project Plan | Schedule important due dates. | September 27th, 2019 |
| Use Cases | Explicitly list the events of the program. | October 20th, 2019 |
| UML | Visualize the design of the project. | October 20th, 2019 |

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|----------------|---|---------------------|
| Test Plan | Plan for how to execute the test cases. | October 30th, 2019 |
| Test Cases | Individual cases that needs to be tested. | October 30th, 2019 |
| User Manual | Guide the user through the game. | October 30th, 2019 |
| Implementation | Implement the code for the game. | November 26th, 2019 |

4.3 Budget

The budget for this game development will cost \$25 for submission fee plus the annual \$100 fee that will be charged by Apple.

4.4 Development Process

This development process will heavily rely on the documentation portion. The design process will set solid infrastructure of implementing the game itself. Adaptations in the documents and changes in the implementations will be made accordingly as we process towards a finished product.

4.5 Development Environment

The development environment for this product will an Xcode. Xcode is an integrated development environment (IDE) for macOS that allows development of software including iOS games. The language of choice will be Swift, which is made particularly for Apple software and products.

4.6 Measurements Program

This app does not require any measurements programs.

5. Risk Management

There are several risk factors when developing an app including within the network as well as the hardware. In order to reduce data interception via network, we can implement a more secure code. For network breaches, we can also implement layers of security to give basic protection. In terms of hardware, iPhones have robust system so there will not be any further actions taken to reduce the risk.

6. Sub-Contract Management

None Specified.

7. Communication and Reporting

| Platform | Use | Frequency | Information |
|-------------|--|-----------|--------------------------|
| Google Docs | Share important documentations online. | Weekly | Vision Doc, Project Plan |
| Slack | Share helpful videos and information online. | Weekly | YouTube Tutorials |
| Trello | Track individual member's responsibility. | Weekly | Deadlines |
| iMessage | Communicate important information online. | Daily | Deadlines, Questions |

8. Delivery Plan

8.1 Deliverables and Receivers

| Identity | Deliverable | Planned Date | Receiver |
|----------|--|--------------|------------------------------|
| D1 | Game Classes Identified (UML Diagram/ CRC Cards) | 10/17/2019 | Giacalone / Development Team |
| D2 | Static Game Home Screen | 10/31/2019 | Development Team |
| D3 | SettingsViewController | 11/28/19 | Development Team |
| D4 | SelChar_ViewController | 11/28/19 | Development Team |
| D5 | MainMenuViewController | 11/28/19 | Development Team |
| D6 | PlayerNumberSelectViewContr | 11/28/19 | Development Team |

| | | | |
|----|--------------------|----------|------------------|
| | oller | | |
| D7 | GameViewController | 11/28/19 | Development Team |

9. Quality Assurance

Galactic Takeover's objective is based off the popular board game, *King of Tokyo*, and the purpose of the GTQA (Galactic Takeover Quality Assurance) Team is to ensure that we do not deviate too far from the original game's design. Throughout the process of creating the game GTQA will constantly test the game to assure that it is functioning as it should. Weekly tests will be conducted by Quality Assurer and once everything has been checked by one member, another member will give a brief look through to assure that nothing was missed. Error detection is to be expected due to new developers however cautious steps will be taken in order to ensure the greatest quality of work is produced.

10. Configuration and Change Management

Change Management Procedure

1. Identify changes.
2. Provide proper documentation for the changes.
3. Review, analyze, and make a request for appropriate changes.
4. Verify that the request is properly submitted and communicated.

Configuration Management Procedure

1. Identify what items are configurable.
2. Record and prepare a report for all of the configurable items.
3. Verify and plan an audit of all configurable items.

11. Security Aspects

- To responsibly provide integrity to our end users, we will ensure that they will have our trust by making them of the rules, regulations, and guidelines to properly play and enjoy the game.
- To ensure availability we will make ourselves available to provide endless support whenever there is an issue, and for common problems, we will refer them over to the FAQ pages.
- To ensure confidentiality we will make each user's information private to only themselves, and allow them whether or not to make it public under their own discretion.
- In regards to information distribution and publishing, we as a team over at Galactic Takeover will decide which information will distribute/facilitated to whom.

Procedure for Monitoring Security

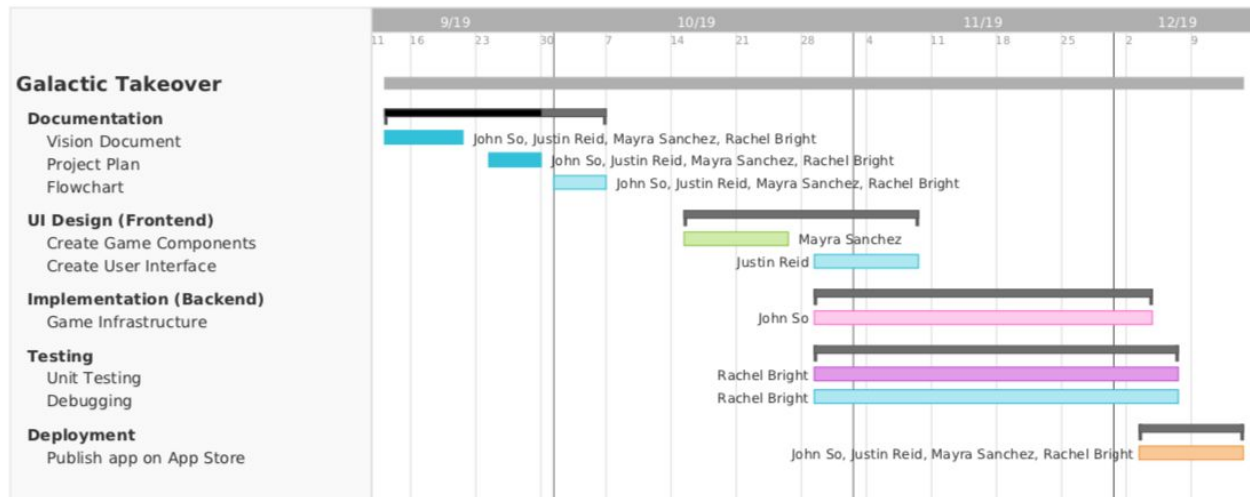
1. Make sure source code is secure and private to only the designated developers
2. Back-up recent updates to software on a frequent basis

Procedure for Reporting Security Incidents

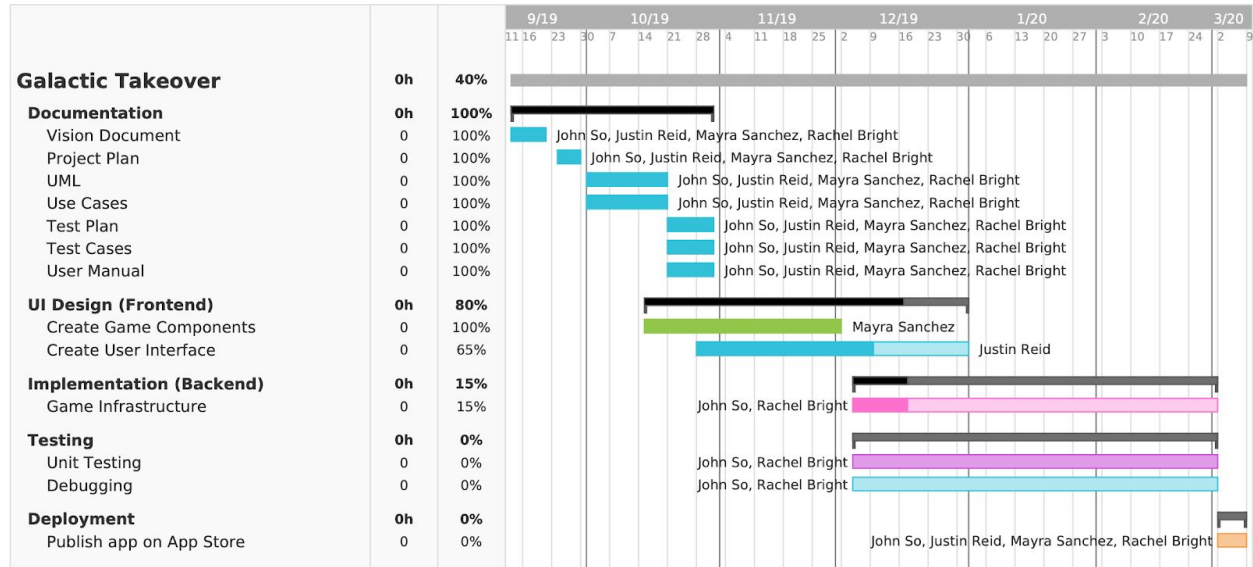
1. Develop a security reporting system, to allow users to submit any sort of bugs or defects while playing Galactic Takeover.
2. Establish a team that is responsible for incident reports.
3. Implement a guideline for the team to follow when issues arise in the element of different scenarios.
4. After the submission of a security incident from the user, provide an analysis to better understand the success/failure rate for each situation.

12. Gantt Chart

Version 1.0



Version 1.1



13. Abbreviations and Definitions

GTQA - Galactic Takeover Quality Assurance

14. References

None Specified.

15. Revision

| Author | Version | Description | Date Dept./Init |
|------------------------|---------|--|-----------------|
| Galactic Takeover Team | 1.0 | Original Version | 9/24/2019 |
| Galactic Takeover Team | 1.1 | 4.2. Added in Use Cases, UML, Test Cases, User Manual; 8.1.Added SettingsViewController, SelChar_ViewCont | 11/26/19 |

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|--|--|---|--|
| | | roller, MainMenuViewContr oller, PlayerNumberSelect ViewController, and GameViewController; 12 Updated Gantt Chart | |
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