Project Plan for King of Tokyo

Distribution:

<California State University Long Beach , Group D>

Appendices:

<Appendix 1>

Contents

1. Overview

King of Tokyo is a board game for 2 to 6 players. This project aims to bring the game to the digital marketplace and to open more opportunities for King of Tokyo to reach new audiences. The game will be designed and developed with the help of the tool Unity. With Unity, our team would have a much easier time creating the game-board representation, and possibilities adding features that are not part of the minimum viable product.

2. Goals and Scope

2.1 Project Goals

Project Goal	Priority	Comment/Description/Reference
Functional Goals:	2	For details see the Project Requirements Specification [2]
Unity Engine	1	This tool will be used to complete a majority of the game, and will allow the game making process to continue smoothly and efficiently
C# Language	1	In conjunction with Unity, this project will utilize C# to translate the game rule logic to code.
Business Goals:		
Mid December Release	1	Aiming to reach a December 10th release date, in accordance with project manager deadlines.
Budget: 0$	1	This project will strictly utilize free, open source software, as to comply with project budget
Technological Goals:		

Project Goal	Priority	Comment/Description/Reference
Quality Goals:	2	
Base game	1	To complete only the game logic, and minimal graphics.
Animated graphics	2	To have an animated visual representation of the board game and all of its parts.
Constraints:		
Minimum System Requirements	1	The application must be able to run on what general computers can handle. Windows 7 or later, ryzen 3/intel I 3, 8GB RAM, Intel Integrated Graphics or any comparable graphics card

2.2 Project Scope

2.2.1 Included

This project will include solely the base game with local multiplayer, from 2 to 6 players. This will meet all of our priority 1 goals set above.

2.2.2 Excluded

This project will exclude multiple language packs.. There are also no plans to complete an online multiplayer mode currently.

3. Organization

The project will be organized using an online tool, Trello, that allows for tasks to be given to different developers and grouped together based on given characteristics. Files that are being developed will use GitHub as a repository to keep the program build stable.

3.1 Organizational Boundaries and Interfaces

King of Tokyo will be developed in the Unity game engine. C# will be the primary language used for writing scripts to be used for player actions. Project will be engineered in coordination with project manager and project team. The project team will have all authority over developmental decisions. At the deadline, project will be delivered to the project manager through GitHub.

3.1.3 Resource Owners

Resource Owners are defined in the Resource Plan in section 5.1.

3.1.4 Receivers

Receivers are defined in the Delivery Plan in section 10.

3.1.5 Sub-contractors

Sub-contractors are defined in the sub-contract management in section 8.

3.1.6 Suppliers

Company: Contact	Deliverable	Comment
Unity	Unity game engine	
Microsoft	Visual Studio IDE	

3.1.7 Cross Functions

Function	Dept.: Contact	Responsibility/Comment
Product Mgmt	Andres Aguilar	Managing the deadline
Service	Dimithri Perera	Allocating jobs to other workers
Training	Andres Aguilar	Compiling a list of resources to use for development
Quality	Nathan Gardner	Testing each build
Technology	Dimithri Perera	Write unit tests
Supply Mgmt	Nathan Gardner	Creating resources (Sprites, animations, etc…)

3.1.8 Other Projects

Project	Org.: Project Mgr	Dependency	Comment
King of Tokyo board game	N/A	Game rules	

3.2 Project Organization

The project will be organized through Trello by the tasks that need to be completed. Initial focus for the project will be on creating an early game build that can be fully tested and built upon.

Andres Aguilar

Project lead: Andres will be the lead developer for the project. He will distribute tasks to all other developers.

Interface designer: Andres also will design and make all user interfaces for the game.

Documentation: Andres is responsible for much of the required documentation

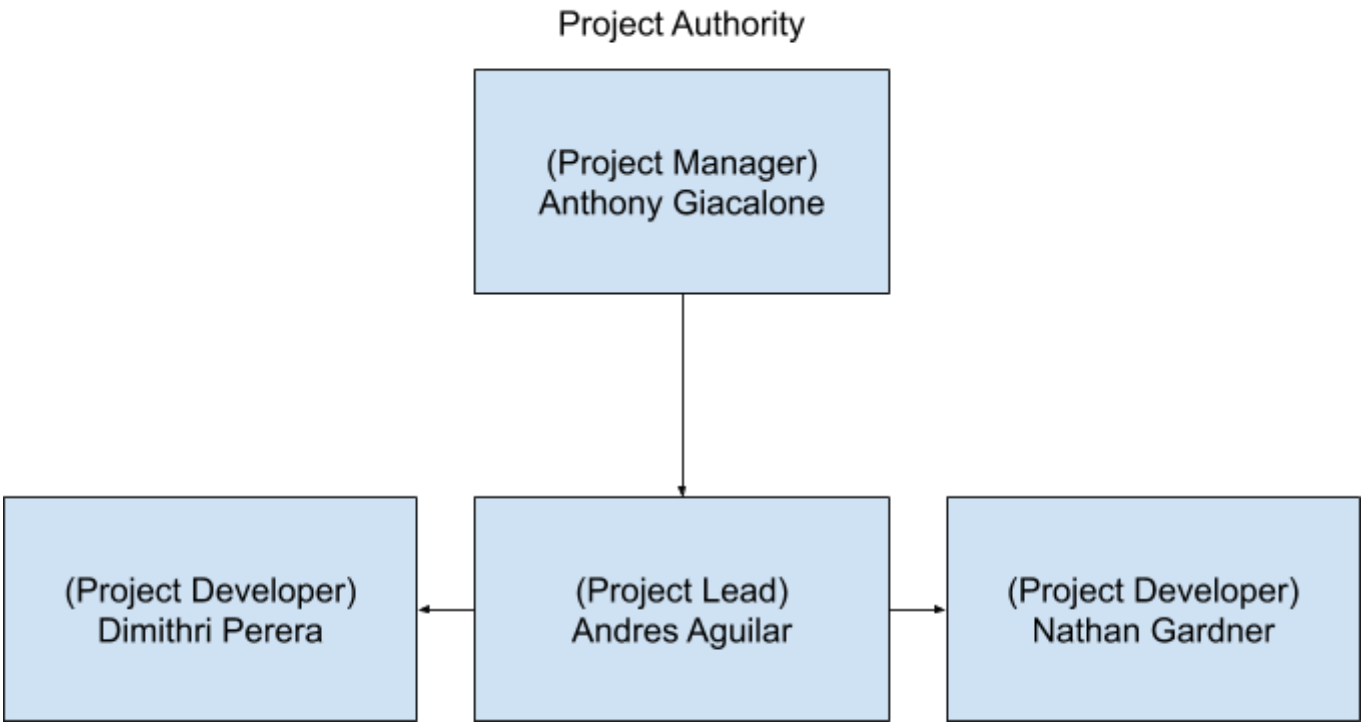
Nathan Gardner

Game designer: Nathan is a part of the game designer team.

Documentation: Nathan is responsible for much of the required documentation

Dimithri Perera

Game designer: Dimithri is a part of the game designer team
Documentation: Dimithri is responsible for much of the required documentation



3.2.1 Project Manager

Role	Organization: Name
Project Manager	Anthony Giacalone

3.2.2 Project-internal Functions

Function	Organization: Name	Comment
Quality Assurance	Andres Aguilar	
System Test Lead	Nathan Gardner	
Validation Lead	Andres Aguilar	
Configuration Mgmt	Dimithri Perera	
Change Mgmt	Nathan Gardner	

3.2.3 Project Team

Organization: Name	Availability	Comment
Nathan Gardner	8 hrs/wk	
Andres Aguilar	8 hrs/wk	
Dimithri Perera	8 hrs/wk	

3.2.4 Steering Committee

The Steering Committee (SteCo) of the project is responsible for determining the direction of development with regards to the creative and software portions.

The SteCo consists of the following members:

Organization	Name	Comment
CECS 343	Nathan Gardner	
CECS 343	Andres Aguilar	
CECS 343	Dimithri Perera	

4. Schedule and Budget

4.1 Work Breakdown Structure

Level 1	Level 2	Level 3
1 King of Tokyo	1.1 Initiation	1.1.1 Evaluation & Recommendation 1.1.2 Develop & submit project charter 1.1.3 Project charter review 1.1.4 Project charter approved
	1.2 Planning	1.2.1 Project initial scope statement 1.2.2 Confirm project team 1.2.3 Commencement of Team meeting 1.2.4 Develop a plan for the project 1.2.5 Submit plan
	1.3 Execution	1.3.1 First Project meeting 1.3.2 Gather user requirements 1.3.3 Design System 1.3.4 Hardware/software needs 1.3.5 Install development system 1.3.6 Testing phase
	1.4 Control	1.4.1 Project management 1.4.2 Project status meetings 1.4.3 Assessment of Risk 1.4.4 Update project plan
	1.5 Finish	1.5.1 Successful completion 1.5.2 Plan for continuous updating 1.5.3 Documentation for the future

4.2 Schedule and Milestones

Milestones	Description	Milestone Criteria	Planned Date
M0	Start Project	Budget Release	09-26-2019
	Stakeholders are aware	Project Stakeholders identified and Proposal reviewed	09-27-2019
M1	Start Planning		09-26-2019
	Purpose defined clearly	Scope and concept described	09-28-2019
M2	Start Execution		09-29-2019
	A quarter completed	Requirements agreed, project plan reviewed, resources committed Coding started, with functionalities	10-05-2019

Milestones	Description	Milestone Criteria	Planned Date
M3	Release Product		11-30-2019
	Project is working and the users a satisfied and gathering feedback	Product system tested, documentation reviewed	12-02-2019
M4	Close Project		12-09-2019
	Project is successful	Users are satisfied	12-12-2019

- A detailed Project Schedule is available in [4]. The Project Schedule is either weekly updated or every 2 days by the Project Manager.

4.3 Budget

Category	Budget for Period in US$'000			
	M0-M1	M1-M2	M2-M3	M3-M4
Equipment	1			
Premises		1	1	1
Tools		1		
Travel costs	2	1	1	2
Training				
Review activities	2	2	3	3
Other		1	1	2
Total	5	6	6	8
Total accumulated	**5**	**11**	**17**	**25**

4.4 Development Process

The game development will initially follow the "The Waterfall Model" process model. This model consist of the following steps.

1. Communication
2. Planning
3. Modeling
4. Construction
5. Deployment

The above process methodology will guide in developing the game and making sure we are on track in meeting our milestones above. Similar gaming projects will be taken into consideration when designing this game since it has to meet all the needs of the aforementioned stakeholders in the vision document. It is mapped from start to finish, of course there would be hiccups along the way but there will always be someone working on the completion of the final product, King of Tokyo user interface and functionalities.

4.5 Development Environment

Item	Applied for	Availability by
Methods		
Use Case	Requirements capturing	M0
Tools		
Unity framework	Design	M2
Languages		
UML	Design	M2
Java	User interface	M2
C++	Coding of functions	M3

4.6 Measurements Program

Type of data	Purpose	Responsible
Number of changed requirements	For effective implementation	Quality Analyst
Number of defects found before M3	Offering the best product	Quality Analyst
Performance data obtained using PC based hardware	to assess the achievement of project requirements since most users will have a PC	Test lead
User Feedback	For improvement	Expert lead

5. Risk Management

All identified risks are documented, assessed and prioritized in the Risk Management Plan [5] by the Project manager. The plan also defines the mitigation and contingency measures and who is responsible for. The Risk Management Plan is updated monthly

or on event and communicated to all affected stakeholders by the Project Manager. The risk status is reported to the line management in the monthly Project Report.

6. Sub-contract Management

Sub-contractor		Sub-contracted Work	Ref. to sub-contract
Company	**Contact**		
N/A			

7. Communication and Reporting

Type of Communication	Method / Tool	Frequency /Schedule	Information	Participants/ Respon.
Internal/External Communication: Texting, Trello, emails				
Project Meetings	Teleconference (Trello, Google Doc)	Weekly or every 2 days	Project status, problems, risks, changed requirements	Project Mgr(Lead) Project Team
Sharing of project data	Shared Project Server (Github)	When available	All project documentation and reports	Project Mgr Project Team
Milestone Meetings	Teleconference	Before milestones	Project status (progress)	Project Mgr Quality Analyst
Final Project Meeting	Teleconference	M4	Wrap-up Experiences	Project Mgr Project Team

8. Delivery Plan

8.1 Deliverables and Receivers

Ident.	Deliverable	Planned Date	Receiver
D1	King of Tokyo full build	12/09/19	Project manager
D2	King of Tokyo user manual and materials	12/09/19	Project manager

9. Quality Assurance

The entire project team are well versed with multiple coding languages and will be doing their best to break the game or in turn looking for bugs in the code. No one wants a half done game. Unhappy customers is bad for business. So we will be:

- Playing the game ourselves so that we can interact with the objects, characters (monsters), and the environment (Tokyo)
- Creating all kinds of combinations to ensure everything functions in the game
- Interacting with the world in a way that the original developers didn't expect or anticipate the game to be played. In this case, we will be using our competitors input in the game
- testing for all kinds of unlimited item glitches and level-breaking glitches throughout the game

10. Configuration and Change Management

The approach to configuration and change management of the game may be either formal or informal and we will be establishing mechanisms to manage the way changes are requested, assessed, approved and implemented. Change is inevitable but we will be keeping tabs on each other and we will be testing the game's effect on different hardware platforms and gathering more information on how to make the game better for the potential customers, at least to the sample customers.

Furthermore we will be following up with the stakeholders and some of the other gaming industries on how they are performing in the gaming world. Our project will undergo various build models in a way that makes them amenable to change. In other words, the King of Tokyo will be compared against other similar games that are available. We will be querying these questions, when in the build was code reviewed? Did design documents go through the review process? Who can make changes to reviewed and approved files on Github? We will have cross-team collaboration and real-time visibility to avoid risky decisions made on the fly.

11. Security Aspects

Our goal with the development of the game is to create an environment where no personal data is required to be held in the cloud or sent over the internet. By not having any data go over a network to servers, the company will not be responsible for any security issues while the user plays the game. Focus will be geared towards protecting payment information when a customer decides to purchase the game. Customer information will be stored in a secure database for advertisements when DLC is released for the board game

12. Abbreviations and Definitions

Abbreviation	Definition
BPC	Buy Power Cards
DC	DISCARD Card
DLC	Downloadable Content
ET	Enter Tokyo
EoT	End of Turn
GE	Gain Energy
KC	KEEP Card
KOT	King of Tokyo
LP	Life Points
M1-M6	Milestone 1 to Milestone 6
MT	Mimic Token
PT	Poison Token
QA	Quality Assurance
ResD	Resolve Dice
RD	Roll Dice
SM	Smash Monsters
SteCo	Steering Committee
ST	Smoke Token
ShkT	Shrink Token
TB	Tokyo Bay
TC	Tokyo City
VP	Victory Points
Y	Yield

13. References

[1] <1> Vision Document for King of Tokyo

[2] <2> Project Requirements Specification for King of Tokyo

14. Revision

Rev. ind.	Page (P) Chapt. (C)	Description	Date Dept./Init.
-	---	original version	10/01/2019