Team A
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Part 1: Current Status

The prototype we have right now is a valid minimum viable product (MVP) with only minor bugs in which the player can play an existed test level with a limited number of cards. After the sprint 5, the prototype should be almost bug-free in a way that all known issues should be fixed. The entire set of game mechanics has not been completed and the only playable level was not optimized to be a formal level in our game.

Part 2: Milestones

1. ## Concept Finalization (Now ~ 2018.12.31)

   Based on the current status of our project, we set the following objectives for the first milestone:
   - Refine the story as well as add more details into it, so that we can have a more strong direction about the further level design for our game
   - Complete the design of some new game mechanics, and refine some parts of the mechanics we already implemented in our game
   - Test these concepts by paper prototype and evaluate the risks

2. ## Game Mechanic Completion (2019.1.1 ~ 2019.1.31)

   A game with a complete set of level mechanics will allow users to do and experience everything in a certain level without any difficulty.
   - Add the black fog into levels.
   - Extend the existed systems to support levels with different altitude.

3. ## Game Flow Completion (2019.2.1 ~ 2019.2.28)

   A game with a complete game flow will allow users to do and experience everything in the game from the very beginning without any difficulty.
   - Add tutorials into the entire gameplay
   - Develop and integrate all required GUIs (start menu, level selection)

4. Alpha Version (2019.3.1 ~ 2019.3.31)

The alpha version of the game will be used to ensure the correct functionality of all game mechanics. It is also used for collecting the initial feedback from the public audience.
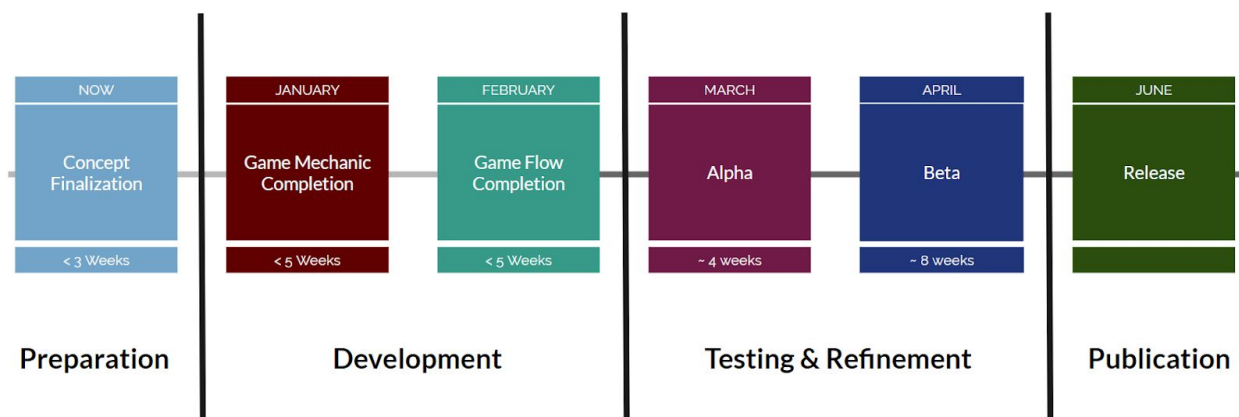- Produce and install all required levels and their related artworks

5. Beta Version (2019.4.1 ~ 2019.5.31)

The goal of beta is To both verify all the refinements made since the alpha version and collect further feedbacks from the public audience
in order to do further refinements.
- Create a strong beta testing plan with testing goals, strategies, responsibilities, and deadlines.
- Select and invite beta testers and sign Nondisclosure agreements.
- Collect feedback from them, which might include reporting bugs, submitting a feature request, journaling.
- Evaluate and analyze collected data and iterate our game based on that. (include bug fix or even new feature)

6. Release (2019.6.1)
- Negotiate with the publisher to discuss the digital copy price, the time to release.
- Community building(Answer questions and take some advice to update the game)
- Marketing policy(discount when holiday, and give out some CD key to draw public attention)
- Bug fix(as always)

NOW	JANUARY	FEBRUARY	MARCH	APRIL	JUNE
Concept Finalization	Game Mechanic Completion	Game Flow Completion	Alpha	Beta	Release
< 3 Weeks	< 5 Weeks	< 5 Weeks	~ 4 weeks	~ 8 weeks	

Preparation   Development   Testing & Refinement   Publication

Part 3: Risks

1. Vertex Count

Currently, the art asset used in the prototype does not meet the standard quality of mobile platform because models we currently have contain too many vertices which easily eats up the RAM of smartphones. A possible solution is to take advantage of the computing power of CPU by using advanced shaders with simpler models. The shader will be written in the way to reappear the voxel appearance of models.

2. Transfer to Mobile Platform

We have not tested the prototype on any platform. Therefore, we have no idea what will going on for our game on mobile phones. Also, moving onto mobile platforms indeed requires us working on connecting interfaces through platform SDK. We are planning to address the issue after we implemented the complete game flow in our game.

3. Cost of Art and Audio Assets

In previous sprints, we made art assets by ourselves, which actually took a lot of time to complete. In this case, we had less efforts on designing and testing. Lack of detailed design and testing will dramatically impair the quality of the product. We are first planning to address the issue by applying to MAGIC Spell Studio for official fundings from our school. With the fundings, we can get access to online resources which may cost money of us. Besides that, we are also planning to ask for help from art and design department if we can get selected by the MAGIC Spell Studio. We can find potential artists for our game and let them collaborate with us in Magic Spell Studio, which provides those artists with first-hand experiences and helps us producing art assets.

4. Marketing

Marketing of a game needs resources and connections in any aspects. We are currently having no access to those resources or connections. The only way we came up with to solve this issue is to apply for the MAGIC Spell Studio and get helps from people working there.

5. Quality Assurance

A successful game always needs large amount of testing. In order for our game to be shipped, we need to thoroughly test it before we get prepared to publish. Currently, we are manually testing our own project, which may produce lots of biases. We are also having opportunities to have playtest sections in labs but those sections will not be always available as we want. In order to have better testing in the development process,

we are planning to put down rules on testing. For example, programmers should do self-testing by themselves and designers have to carefully test all functional requirements they designed before. Also, we are considering to find people working in our team specifically on testing.

6. Estimation of Development Time

Giving an accurate estimation on the development time is always difficulty. Running out of time may push off the entire business plan. In order to have a clearer mind of our development ability, we need a process of fast prototyping with regular checkpoints put in between. With those checkpoints, we can figure out the extreme of our ability, therefore having opportunities to plan and adjust the development beforehand.

Part 4: Possible Business Model

1. Advertisements Add-ons

Having short advertisements every time when players quit a level is a common way for profits for mobile games. First, people can gain from companies for which those advertisements advertise for. Second, people can put a one-time in-app purchase inside the game for users to completely get rids of the advertisements.

2. Fatigue / Energy System

Having a fatigue system limiting users opportunity on playing can be used to make money from the game. In this model, users can choose to make in-app purchases for more energy so that they can play more. However, this method has potential risks such as cheating.