**MF1 - Tutorial Level**

As for MF1, we will be representing the game first level also known as Tutorial Level with forest - medieval village theme it is the first and simplest level to introduce players to game mechanics and storyline. There are 5 stages: Researching, Designing, Coding/Implementing, Polishing and Testing to make the level playable.

As an estimation, the MF1 - Tutorial Level may take up to 42 hours to get it done. There are storyline, level characters such as NPC/Villagers, animals/Living creature, animations, level design. Firstly we have to research and thinking about the storyline, where and where will the level going to be placed, level scenarios, what do player are looking for now, what is the trends in the storyline and how to making it attractive and meaningful for players to experiences it. Secondly, after decided the level themes we aimed to design how the level going to look like, what will be placed in the level, Props, creatures, UI that going to use, finding references having the similarities to our game then based on them to visualize the first concept arts. Thirdly, after agreed on our level concept arts we will start to model them into 3D objects and animate what needed to and detailed sketch 2D object. This is one of the longest processes of all there are 5 stages to finish a model: Block out, Sculpt, Retopology, polishing and animation. We will block the basic shape of the object first then sculpt their details then retopology them by recreating an existing surface with more optimal geometry for animation and Game ready. Finally is making animations for them. However, not all the object have the same workflow depend on their use in the level we will spending a reasonable effort for each since this is a time limit project. Then Coding and Implementing the level, in this stage, we will be using codes to gathers all the "pieces" that we designed, firstly is coding the introduction board like how or when it will appear to instruct players, Level management for example Wind, Daylight/Weathers system, NPC behaviour mechanics, Dialog system to manage story script enable NPC ability to "talk". Finally is polishing and testing the level, in this stage, we mainly adding post-processing effects, config the light sources, contrast for the levels, polish objects placement then each of the member will test it out a few times try to find any errors or missing point that needed to be changed.

**MF2 - Main Character**

For our game main character which is MF2, we decided to go with bounty hunter player will control him using key/mouse input to experiencing the game. There are 4 main stages: Researching, Designing, Coding/Implementing and Testing in the Character creation process.

As an estimation, this process may take up to 13 hours in total. Following with first two processes is Researching and designing. Our team will have to initialize together the basic theme style while research for references. After decided on character basic theme, we move to sketch up his first appearance then model him into 3D with Block out, Sculpt, Retopology, polishing then the animation for the character. Move over to Coding/Implementing stage, in this stage, Nathan will be developing a character controller and implement it to the character model giving the player abilities to control it with key/mouse input and animator controller that will allow our character to play different animation depend on the key input along. Finally is testing as for this process the character will be controlled by the tester and start playing with him a bit to check for errors.

**MF3 - Health Mechanic**

In MF3 - Health Mechanic, our plans is to create a system that can represent how many times players can substance from outsources damage such as from enemies, traps, negative effects. Similar to Character this Minimum viable feature will have 4 stages: Researching, Designing, Coding/Implementing and Testing.

I estimated that these process will take 7 hours in total to complete. Different from the first and second Minimum Viable Feature, we decided to cut out most of the work for design and focus more on the Coding/ Implementing this feature to the game. Firstly I will research on how can I create an optimise Health System that can implement for Main Character Controller code so that when player Health is at Zero players will not able to control his Character anymore. During it, our team also need to agree on how can we display player health using a simple UI can easy to make but also trendy. After researching stage, I will apply our results and start drawing and coding our feature out and implement it to our game. Finally, We will run the character into enemies and into traps to make sure that health decreases on contact. Run the character into health replenishment items to make sure that health increases on contact as for testing this feature.

**MVF4 - Enemies**

With this MF4 - Enemies the process will be the 90% similar as MF2 - Main Character since this also the character creation process with different behaviour and as non-player characters. There are also 4 main stages: Researching, Designing, Coding/Implementing and Testing in this creation process.

Since Enemies is not only alive objects it also including Traps so this feature is one of the most complicated among all. As an estimation, this process may take up to 28 hours in total. The first two processes are Researching and designing. Our team will have to sit down together and agreed on the basic theme style while research for references. After that, we move to concept up enemies the first appearance then models them into 3D with Block out, Sculpt, Retopology, polishing then the animation for the character. Then at Coding/Implementing stage, we will be developing a simple enemies AI that allow them can do simple wandering based on placed patrol path, player detection when the player is near a certain range and animator controller that same with the main character. Finally is testing as for this process the enemies will be placed in the testing field level, and tester will control the main character toward to them to check their detection system and patrol system along with damage system.

**MVF5- Initial Death Handling**

For MF5 - Initial Death Handling, we are aiming to develop a system that is a subset from Health Mechanic that serves as a penalty for running into enemies or traps too many times but also a motivation for the player that wants to pass their limit or fix their mistake. At this feature, most of the work will also be more focus on the Coding/Implementing than designing since there are no actual models or heavy arts that needed to use.

As for no need to spend a lot of time to design anything much and most of the time is about searching on how to develop the code and thinking about the effect that will show up when the Initial death and testing by purposely kill the character on each enemy and trap to see if the character is brought back to the start of the room we estimated this feature will likely need 5 hours to finish.

**MVF6 - First Section**

As for MF6, after the first level, we will be representing the game first level also known as Castle Level with medieval castle theme it is the first challenge level that player need to pass during the experience, players will face a lot of obstacles and enemies that will stop the player to reach to the end of the level. With the same workflow as the tutorial level, there are 5 stages: Researching, Designing, Coding/Implementing, Polishing and Testing to make the level playable.

As an estimation, the MF6 - First Section may take up to 48 hours to get it done. There are storyline, level design with the use of Enemies/Traps from MF4. Firstly I have to research about the design of the castle and implement it to level design and thinking about the storyline, to make it enjoyable for players to experiences it. Secondly, after agreed on the level themes we start to sketch out what needed for the level, props like the floor, walls, accessories, etc... as concept arts then model them into 3D and detailed 2D art that needed. Next is making animations for them. Then Coding and Implementing the level, as this feature is a combination of others MF such as Enemies, Health, Main Character, Initial Death Handling placing them in the level so there is not much of coding to do beside trap activation, etc... Finally is polishing and testing the level, adding post-processing effects, config the light sources, contrast for the levels, polish objects placement similar to tutorial level. Then each of the members will test it out a few times try to find any errors or missing point that needed to be changed.

**EVF1 - Second Level**

For the first extension of our game, we are planning to enlarge our game by introducing a whole new level along with new enemies, traps, obstacles extending the story making the game more interesting. With the same workflow with other levels, this feature also has 5 stages: Researching, Designing, Coding/Implementing, Polishing and Testing to make the level playable.

I estimated that to complete my tasks this level it may take up to 50 hours since this level will be more complicate and interesting than the previous two. Starting with researching how the level going to look like, what is the theme, how to link the story to this new level, sketching briefly about it. Then I will move on to design it from making assets, props, NPCs. Then create some codes that are necessary for the level, or re-use the old code such as weather control, trigger event, etc...Finally is putting them together as a level then testing it to see if something that needed to fix.

**EVF2- Ability Items**

For our second Extend Viable Feature, we will provide to our player extra helps by adding Items that allow their character to have some special power. This feature will have 5 stages: Researching, Designing, Coding/Implementing, Polishing and Testing to make them playable.

As an estimation, this task may take up to 30 hours to complete since some ability is going to be unique in design and mechanics so I need to research deeper and more time to think of the design then modelling, coding them is also take a while. Finally is polish and testing them to see if they are working properly or not.

**EVF3 - Checkpoints**

Ultimately is out final Extend Viable Feature is checkpoints, this feature will provide players a variety of respawning point so they can be more flexible in their in-game experience. Similar to other features. This feature will have 5 stages: Researching, Designing, Coding, Polishing and Testing.

As an estimation, this task may take up to 12 hours to complete. Firstly I will need to researching and sketch up about the design and respawn mechanics, then coding it system allows the player to save their process and respawn when they return the game or back from death. Finally is testing to see if those mechanics are working normally.

**Estimation Plans Board**

