

MILESTONE 1

Meeting Minutes #1

Meeting Details

DATE:	26/06/2021	TIME:	2PM -	LOCATION:	
TYPE OF MEETING	Initial Planning Meeting				
CHAIR					
Attendance	Edward, Jiaqi, Danver				

1. [Reading through spec](#)
2. [Aligning team member availability and meeting times](#)
3. [Break down spec + requirements for Milestone 1](#)
4. [Allocate task items + deadlines → consider frontend and backend](#)

Timeline:

<https://docs.google.com/spreadsheets/d/1GCr6xn0mcgHIRf7611sg-sgdz4XZWNXic64GH2kHiEM/edit?usp=sharing>

Outcomes

1. Reading through spec

- Clarified epic stories/issue board in gitlab
- Went through initial UI interface planning

2. Aligning team member availability and meeting times

- Meeting every **even day** until Milestone 1 is due → around 8PM Sydney time
 - Just be quick (~20 mins) check ins to make sure everyone is on time and completing tasks

3. Break down spec + requirements for Milestone 1

Task	Description	Notes
1	Model the requirements of the client as user stories on the issue board in GitLab;	<ul style="list-style-type: none">- Requirements are from 2 - 2.4- Delegate based off requirement section points
2	Plan for the sequencing of completion of work of the project;	<ul style="list-style-type: none">- Check in every even day until 9th July- Check in with issue board every time +

		other diagrams
3	Produce an initial domain model for the backend component of your project in the form of a conceptual UML class diagram;	<ul style="list-style-type: none"> - Create a draw.io diagram based off classes and interaction etc - A lot of classes are already in src code
4	Document any initial assumptions you will need to make in writing your implementation of the specification;	<ul style="list-style-type: none"> - Assumptions based off user stories + as code develops
5	Produce a low-fidelity user interface design.	<ul style="list-style-type: none"> - Front end using JavaFX - Making interface with design principles and usability principles - As intuitive as possible

4. Allocate task items + deadlines → consider frontend and backend

Task board for Milestone 1 (not project timeline)

Task #	Main goal	Task Description	Delegated to	Deadline
1, 2	Model tasks from 2.0	<p>Create user stories for Character interaction Create user stories for difficulty options</p> <p>Create user stories for gold interaction Create user stories for experience interaction Create user stories for obtained item Create user stories for get, use, lose card</p>	Ed, Danver, Jiaqi, Adrian to all do on Monday	28/06
1, 2	Model tasks from 2.1	<p>Create user stories for 2.1 enemies interactions Create user stories for 2.1 enemies spawn conditions</p> <p>As a client I want an enemy called slug to fight the character, so that the character gains exp and gold by defeating me.</p> <p>As a client, I want an enemy called slug to spawn randomly on path tiles so that the character can come across me to fight.</p>	Ed - Vampire Jiaqi, Adrian - Slug Danver - (zombie)	29/06
1, 2	Model tasks from 2.2	<p>Create user stories for 2.2 buildings interactions Create user stories for 2.2 buildings placement conditions</p>	Ed - Vampire castle, Barracks Jiaqi - (last three) Danver - (Zombie pit, tower, village) , Adrian	29/06

1, 2	Model tasks from 2.3	Create user stories for 2.3 basic items stats Create user stories for 2.3 basic items obtain conditions	Danver - (money, potion) Ed - (Armours) Jiaqi - (Sword), Adrian	29/06
1, 2	Model tasks from 2.4	Create user stories for 2.4 rare items	Ed, Danver, Jiaqi, Adrian to all do on Monday	28/06
1, 2	Model epic stories	Create epic stories based off all user stories modelled	Ed, Danver, Jiaqi, Adrian to do	29/06
1, 2	Model story cards → user stories, implementation, label with priority, acceptance criteria	Create story cards based off all user stories	Ed, Danver, Jiaqi, Adrian to do Tues	29/06
3	Create classes and attributes in draw.io	Things to consider include: Inheritance & Interface Design, Aggregation, Composition and Cardinality, Delegation of Responsibility, Modelling of Entities, and other related design principles, as well as UML formatting.	Ed, Danver, Jiaqi, Adrian to do Tues	30/06
4	Document assumptions	Document all assumptions that you think your implementation will need to make about the requirements. Remember that good assumptions clear up an ambiguity in the specification by articulating a behaviour (what a particular feature/rule of the game is) rather than an implementation (how it will be programmed). Assumptions should only be used to clarify genuine ambiguities and should not reduce the scope of the specification.	Ed, Danver, Jiaqi, Adrian to do as we move along each day	1/07

5	Produce low level fidelity design	<p>You will need to produce a rough design of:</p> <ol style="list-style-type: none"> 1. What your frontend will look like; and 2. How the user will interact with the application. <p>It is a <i>low-fidelity</i> design, so sketches using OneNote, or wireframes using draw.io or LucidChart will suffice. Your UI design should aim to be aesthetic, simple and accessible. There are no strict guidelines for how this design should be formatted or structured</p> <ul style="list-style-type: none"> - Max 10 wireframes created 	Ed, Danver, Jiaiq, Adrian to do on thurs	1/07
	Cleaning up all files		Ed, Danver, Jiaiq, Adrian to do on Frid 5PM	2/07

EPIC STORIES

Priority Legend

1 = DO FIRST in the timeline

10 = DO LAST in the timeline

For further clarification on epic/user stories, refer to this [forum post](#)

For further clarification on story points, refer to this [forum post](#).

Epic Story	User Stories/Story cards	Acceptance Criteria	Priority (1-10)	Story Points
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				(1-10)
<p>Enemies: As a human player, I want to be challenged to fight different enemies so I can receive rewards such as gold, items and exp.</p>	<p>As a Human Player, I want to fight a zombie, so I can receive rewards as gold, items and exp</p>	<ul style="list-style-type: none"> • Zombie has low health, moderate damage • Zombie is slower compared to other enemies • Zombies have higher battle radius than slugs • Zombies spawn from the pit every time the Character completes a cycle of the path. • Zombie has a chance of critically biting a soldier, turn them into a zombie 	High	2
	<p>As a Human Player, I want to fight a Vampires, so I can receive rewards as gold, items and exp</p>	<ul style="list-style-type: none"> • Vampires have high damage • Vampires are susceptible to the <i>stake</i> weapon • Vampires have high range of support and battle • Vampires have chance to make critical damage 	High	2
	<p>As a Human Player, I want to fight a Slugs, so I can receive rewards as gold, items and exp</p>	<ul style="list-style-type: none"> • Slug have Low health and low damage • Slug the battle radius is the same as the support radius for a slug 	High	1
	<p>As a Human Player, I want to fight enemies when they come into battle/support radius, so that I only fight them when they're close enough to the Character.</p>	<ul style="list-style-type: none"> • Character and enemies have action order • Character will fight automatically when Character and enemies are in same position 	High	5

Weapons: As a Human Player, I want to use a variety of weapons, so I can deal more damage to enemies	As a Human player, I want to be able to use a sword to fight enemies. So that the enemy dies faster.	<ul style="list-style-type: none"> • Sword can be purchased in the hero's castle or looted from the enemies or obtained from cards lost due to being the oldest and replaced. • Sword deals more damage than base damage 	High	2
	As a human player, I want to be able to use a stake to fight enemies. So that the enemy dies faster.	<ul style="list-style-type: none"> • Stake's damage is lower than the sword's damage. • Stake deals higher damage to vampires than swords. • Stake can be purchased in the hero's castle or looted from the enemies or obtained from cards lost due to being the oldest and replaced. 	Medium	3
	As a human player, I want to be able to use staff to fight enemies. So that the enemy dies faster.	<ul style="list-style-type: none"> • Staff's damage is lower than both the sword and stake. • Staff has an ability called trance, which can turn an enemy into an allied soldier which fights alongside the character. • Staff can be purchased in the hero's castle or looted from the enemies or obtained from cards lost due to being the oldest and replaced. 	Low	5
Armour: As a Human Player, I want to equip a variety of armour, so I receive less damage from enemies	As a human player, I want to be able to equip armor, so that the damage the character received is reduced.	<ul style="list-style-type: none"> • The amour can be purchased in the hero's castle or looted from enemies. • The amour reduces all damage received by the character by 50%. • Armor has the chance to be looted from enemies • Armor has the chance to be obtained from a 	High	1

		lost card		
	As a human player, I want to be able to equip a shield, so that my Character can defend against critical Vampire attacks.	<ul style="list-style-type: none"> The shield reduces vampire's critical attack chance by 60% Shields have the chance to be looted from enemies Shields have the chance to be obtained from a lost card 	Low	3
	As a human player, I want to be able to equip a helmet, so that my Character can defend against enemy attacks.	<ul style="list-style-type: none"> The helmet reduces the damage received by the character and also reduces the damage dealt by the character. Helmets have the chance to be looted from enemies Helmets have the chance to be obtained from a lost card 	Low	3
Movement / Cycles: As a Human Player, I want the character to cycle around the map, so they can reach the Hero's Castle	As a Human Player, I want to be able to purchase items after completing a full cycle of the path so I can stock up for future battles.	<ul style="list-style-type: none"> Given my Character, when they complete a full cycle and reach the Hero's Castle, then they should be able to purchase items. Can the Character perform a full cycle? Can the Character buy items after completing a full cycle? 	High	5
	As a Human Player, I want my character to move clockwise around the map so I can progress in the game.	<ul style="list-style-type: none"> Can my Character move on the path? Is my Character moving clockwise? Can my Character only move on path tiles? 	High	5
Buildings: As a Human Player, I want to create allied buildings so that my character can receive gold, experience and items.	As a Human Player, I want an enemy building to generate Vampires so that my character can kill them for gold and xp.	<ul style="list-style-type: none"> Given a Vampire castle, when the character completes 5 cycles of the path, then a vampire is spawned nearby on the path Building is placed only on non-path tiles adjacent to the path 	High	2

As a Human Player, I want to create enemy and neutral buildings so that my character can receive gold, experience and items.	As a Human Player, I want an enemy building to generate Zombies so that my character can kill them for gold and xp.	<ul style="list-style-type: none"> Given a Zombie Pit, when the character completes 1 cycle of the path, then a zombie is spawned nearby on the path Building is placed only on non-path tiles adjacent to the path 	High	2
	As a Human Player, I want a Tower to help attack enemies so that my character can fight more enemies in combat.	<ul style="list-style-type: none"> Given a Tower, when enemies are within its shooting radius, then enemies will be attacked by the Tower. Building is placed only on non-path tiles adjacent to the path 	Low	3
	As a Human Player, I want a Village to regenerate my health so that my character can stay alive in combat.	<ul style="list-style-type: none"> Given a Village, when the character is within its support radius, then the character will regain health when passing through. Building is placed only on path tiles. 	Low	1
	As a Human Player, I want a Barracks to generate soldiers so that my character can fight more enemies in combat.	<ul style="list-style-type: none"> Given a Barracks, when the character is within its support radius, then an allied soldier is produced. Building is placed only on path tiles. 	Medium	4
	As a Human Player, I want a Trap to damage enemies when stepped on so that my character can fight enemies outside of their battle radius.	<ul style="list-style-type: none"> Given a Trap, when an enemy steps on the trap, then the enemy is damaged (and potentially killed if it loses all health). Trap is destroyed after being stepped on by an enemy Building is placed only on path tiles. 	Low	1
	As a Human Player, I want a Campfire to	<ul style="list-style-type: none"> Given a Campfire, when the character is within its support radius, then the character 	Low	1

	increase my character's attack capacity so that enemies can be killed quicker.	<ul style="list-style-type: none"> deals double damage. Building is placed only on path tiles. 		
	As a Human Player, I want to have the option to purchase armour, shields, helmets and weapons by using gold.	<ul style="list-style-type: none"> The character starts at the Hero's castle when the Human Player commences the game Given the Hero's Castle, when the character completes the required number of cycles of the path, then the Human Player can purchase items using gold. The Hero's Castle always exists There is only one Hero's Castle during the course of the game. The position of the Hero's Castle is fixed. I.e. The building cannot be spawned and placed 	High	6
Items (gold/potions/rare items): As a Human Player, I want the Character to utilise gold, so I can purchase items from the Hero's Castle	As a human player, I want the Character to obtain gold so that they can purchase purchase equipment to assist in battle	<ul style="list-style-type: none"> Character is able to buy items when he is in the same position where the castle is located. Character must have required amount of gold for each item purchased Can be generated from lost cards or items 	High	2
As a Human Player, I want the Character to utilise potions, so I can heal the player	As a human player, I want the Character to be able to consume a health potion so that they can regenerate health	<ul style="list-style-type: none"> Character is able to use items when player drag the card to the game console Purchased from Hero's Castle Looted from enemies Picked off the ground Obtained from lost cards or equipment 	Low	1
	As a Human Player, I want the Character to have the chance to respawn if killed in	<ul style="list-style-type: none"> Given the Character is killed by an enemy, when the 'The One Ring' is equipped, the Character is respawned with full health 	Low	

	battle.			
<p>Human Player Interaction / Menu Interaction / Settings / Frontend</p> <p>As a Human Player, I want to have a seamless interaction with game menus and controls so that I can focus on achieving goals in the game.</p>	<p>As a Human Player, I want to be able to view my current inventory as well as the Hero's Castle shop front so that my Character can buy and sell items.</p>	<ul style="list-style-type: none"> Given the display menu, when the character enters the Hero's Castle, then the Human Player can purchase armour, shields, helmets, weapons The current level of available gold to spend is displayed The price of each item in gold is displayed The abilities of each item are displayed The Human Player has the option to exit the menu and continue the game 	High	5
	<p>As a Human Player, I want to be able to pause and resume the game so that I can take breaks and analyse the situation</p>	<ul style="list-style-type: none"> Given the game is currently live, when the Human Player presses 'spacebar', then the game is paused Given the game is currently paused, when the Human Player presses 'spacebar', then the game is resumed Enemies, buildings and the character should remain in their current state while paused 	High	?
	<p>As a Human Player, I want to be able to drag and drop items from my character's inventory so that I can assist my Character in combat</p>	<ul style="list-style-type: none"> Given a full inventory, when an additional card is obtained, then the oldest card in the inventory should generate 	Medium	2

	As a Human Player, I want to see the current status of my Character's health bar, gold and experience so that I know my progress to winning the game.	<ul style="list-style-type: none"> • The health bar decreases accordingly when the Character takes damage from an enemy • The health bar increases to full capacity when the Character takes a health potion • The amount of XP increases when the Character defeats enemies and when cards/equipment are lost • The amount of gold decreases accordingly when items are purchased from the Hero's Castle • The amount of gold increases accordingly when enemies are killed, items are sold in the Hero's Castle or when cards/equipment are lost. 	High	3
Game Modes: As a human player, I want to be able to play the game in a variety of different difficulty levels.	As a Human Player, I want to be able to play in a Survival mode, so that I can experience the game in a different difficulty	<ul style="list-style-type: none"> • Given my Character, when I reach the Hero's Castle after a full cycle, then I can only purchase 1 health potion each time I shop. • Can my Character win with these settings? 		3
	As a Human Player, I want to be able to play in a Berserker mode, so that I can experience the game in a different difficulty	<ul style="list-style-type: none"> • Given my Character, when I reach the Hero's Castle after a full cycle, then I can purchase no more than 1 piece of protective gear each time I shop. • Can my Character win with these settings? 		3
	As a Human Player, I want to be able to play in a Standard mode, so	<ul style="list-style-type: none"> • Are all settings normal? (Yes/No) • Can my Character win with these settings? 		1

	that I can experience the game in its original difficulty			
Goals: As a Human Player, I want to reach a certain goal in order to finish the game	As a Human Player, I want to collect 90000 gold to win the game, so I can reach for a sense of accomplishment	<ul style="list-style-type: none"> • Has my Character collected 90000 gold? (Yes/No) • Can my Character win by collecting 90000 gold? 	High	2
	As a Human Player, I want to cycle the path 15 times without dying to win the game, so I can reach for a sense of accomplishment	<ul style="list-style-type: none"> • Has my Character completed 15 cycles? (Yes/No) • Can my Character win by completing 15 cycles? 	High	2
	As a Human Player I want to complete a combination of gold,exp and cycle goals, so I can challenge myself to win through harder difficulties.	<ul style="list-style-type: none"> • Has my Character collected 90000 gold AND/OR Has my Character collected 90000 exp? AND/OR Has my Character completed 15 cycles? (Yes/No) 	Medium	4

Assumptions:

The Character

- Can only travel on the path provided in the specification.
- There can be a maximum of 8 cards at one time in a Character's card slot
- Can only equip one weapon, one armour, one helmet and one shield at a single time
- Will only battle enemies that come into the radius if they are into distance path-wise.
That is, enemies can be in battle radius but not where the path doesn't reach.
- Has a max inventory of 10 + 4 (equipped)

Capacity and Limits

- There cannot be more buildings than there are path and non-path tiles in the world.
- There cannot be more enemies than there are path tiles in the world.
- There cannot be more than 12 allies at one time.

Items

- The health potion is sold at a price of 20 gold.
- The rare item "the one ring" is dropped at a rate of 1%.
- When max cards/equipment is exceeded, destroy oldest and give character 20 gold + 20 exp instead.
- Every item is sold for 5 gold at the Hero's Castle
- All items have a 5% chance of being dropped from enemies, 1% One True Ring, Gold has the remaining 34% chance of being dropped otherwise.
- Gold has a 10% chance of being randomly spawned on the floor.
- Gold on the floor is randomised between 1-10 gold
- The Staff has a 20% chance of turning an enemy into an allied soldier per strike. The effect lasts for 10 seconds until the allied soldier turns back into an enemy.

Cards

- All cards have a 3% chance of dropping when an enemy is killed. Only one card/item is dropped per enemy killed.

Weapon	Price (gold)	Damage (Health points reduced)	Drop rate from slaying enemies
Sword	100	9	4%
Stake	45	4.8/12(to vampire)	5%

Staff	80	4	4%
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Armour	Price (gold)	Damage received reduced	Drop rate from slaying enemies
Armour	65	50%	3%
Helmet	60	40%	10%
Shield	30	30%	5%

- It is possible that a card is not dropped when an enemy is killed since the percentages do not add up to 100%.

Enemies & Allies

The battle and support radius for each enemy will be calculated with radii as a straight line distance.

Moving entity	Damage per hit	Hit speed (per Character movement)	Walk speed (per Character movement)	Health	Experience gained for slaying	Gold gained for slaying	Battle radius	Support radius	Chance for ability to activate
slug	3	1	1 tile	6	10	5	1 tile	1 tile	N/A
zombie	5	0.5	0.5 tile	10	20	10	2 tiles	3 tiles	20%
vampire	6 / 8-10 (when ability activated)	1	1 tile	20	50	25	2 tiles	3 tiles	30%
Allied soldier	1	1	1 tile	40	N/A	N/A	N/A	N/A	N/A
Character	3	1	1 tile	100	N/A	N/A	N/A	N/A	N/A

Buildings

1. The Tower's damage is 3, the radius of the Tower is 5.
2. Village will regain 25 health for character
3. Trap's will damage 5 health for an enemy.
4. Campfire's radius is 5.

Meeting Minutes #2

28/06

Attendees

- Denver
- Ed
- Jiaqi
- Adrian

Discussion points

- Need clarification on story cards vs epic stories
- Construct user stories for spec
 - Segment user stories into epic categories
- Getting Adrian up to speed on current team progress
- Write assumptions as we create user stories

Actions items

- Categorise user requirements into epic stories
- Create user stories for each epic story
- Write assessment criteria for each user story

Meeting Minutes #3

29/06

Attendees

- Denver
- Ed
- Jiaqi
- Adrian

Discussion points

- Watched Tuesday lecture to gain clarification on user story criteria
 - Story points are just the estimated effort needed to complete a user story
- Need to fix current templates to match needed assignment requirements
- We need to start putting the user stories onto the gitlab issue board
- Create the template for the story cards in GitLab

Actions items

- Push all stories onto gitlab issue board
- Reflect priorities on timeline
- Start creation of user interface design and UML diagrams

Meeting Minutes #4

30/06

Attendees

- Denver
- Ed
- Jiaqi
- Adrian

Discussion points

- Pairs to work on UML and User Interface Designs
 - UML → All design principles and aggregations/compositions are used
 - UID → Think of possible wireframes before implementing
- Review user/epic stories
 - Reflect onto timeline

Actions items

- Complete UID and UML as much as possible to show Matthew at Tute

Meeting Minutes #5

1/07

Attendees

- Denver
- Ed
- Jiaqi
- Adrian

Discussion points

- Review user/epic stories
 - Story point allocation
 - Need to minimise epic stories and broaden acceptance criteria
- Review UID with tutor
- Review planning + meeting minutes with tutor
- Reconfigure the layout of UML + Issue Board

Actions items

- Polish all items for submission

Project Timeline

Key:	
Ed	
Danver	
Jiaqi	
Adrian	
ALL	

	Monday	Tues	Wed	Thurs	Fri	Sat	Sun
Week 4 (21/06)			<i>Standup</i>	<i>Standup</i>	<i>Standup</i>		<i>Standup</i>
			Read spec	Read spec	Began timelining		Construct User Stories
Week 5 (28/06)	<i>Standup</i>	<i>Standup</i>	<i>Standup</i>	<i>Standup</i>	<i>Standup</i>		
	Construct User Stories	Construct User Stories	Design UML	Create UML	Review User Stories		Sprint Planning Meeting

			Design UML	Create UML	Review UML		
			Interface Design Sketch	Create Interface Design	Review Interface Design		
			Interface Design Sketch	Create Interface Design	Review planning and assumptions		
					Milestone 1 DUE		
Week 6 (5/07)	<i>Standup</i>	<i>Standup</i>		<i>Standup</i>			
	Create key entities	Write integration tests for MVP to get format unified	Write unit tests for Path Buildings, Shop backend	Write integration tests for Path Buildings	Write integration tests for Shop backend		
	Formulate 3 design patterns	Write implementation for MVP to get format unified	Write unit tests for Other Buildings, healing: potions, one true ring and difficulty	Write integration tests for Other Buildings	Write integration tests for healing: potions, one true ring and difficulty		
	Write unit tests for MVP to get format unified		Write unit tests for Enemies: Battle radius, vampire, weapons: sword, stake, staff	Write integration tests for Enemies: Battle radius, vampire	Write integration tests for weapons: sword, stake, staff		
	Review Starter Code		Write unit tests for Enemies: slug, zombie, armor: bodyAmo	Write integration tests for Enemies: slug, zombie	Write integration tests for armor: amour, shield, helmet		

			ur, shield, helmet				
		Review assumptions and domain model	Review assumptions and domain model	Review assumptions and domain model	Review assumptions and domain model		
Week 7 (12/07)	<i>Standup</i>	<i>Standup</i>		<i>Standup</i>	<i>Standup</i>		
	Impleme nt Path Buildings	Implement Path Buildings	Impleme nt Shop	Impleme nt FrontEnd	Complete UML + domain model	Complete UML + domain model	Sprint Planning End
	Impleme nt Other Buildings	Implement Other Buildings	Impleme nt Healing and difficultie s	Impleme nt FrontEnd	Keep implemen ting front/bac kend features	Keep implementin g front/backen d features	
	Impleme nt Enemies	Implement Enemies	Impleme nt Weapons	Impleme nt FrontEnd	Polish Milestone #2 requirem ents	Polish Milestone #2 requirement s	
	Impleme nt Enemies	Implement Enemies	Impleme nt Armour	Impleme nt FrontEnd			
			Ensure complete test coverage	Demonst rate Mileston e 1	Ensure complete test coverage	Ensure complete test coverage	
Week 8 (19/07)	<i>Standup</i>		<i>Standup</i>	<i>Standup</i>	<i>Standup</i>		
	Mileston e 2 DUE			Demonst rate Mileston e 2			
Week 9 (26/07)	<i>Standup</i>	<i>Standup</i>	<i>Standup</i>	<i>Standup</i>	<i>Standup</i>		

Week 10 (2/08)	Standup	Standup	Standup	Standup	Standup		
	Milestone 3 DUE			Demonstrate Milestone 3			
Week 11 (9/08)	Standup						

Sequencing, Allocation and Timespan Rationale:

- Week 6: Monday + Tuesday: These days are focussed on understand and building the main foundations of the game. We intend to pair program the MVP so that we all have an idea of format our code layout should take.
- Week 6: Wed: Focus on writing acceptance and unit tests for all epics
- Week 6: Thurs + Fri: Focus on writing integration tests for all epics. Integration tests will take longer to complete than unit tests, so 2 days were allocated
- Week 7: Mon - Thurs: These four days are allocated for the implementation once tests are completed. Beginning Wednesday, we start to ensure that our code completes test coverage.
- Week 7: Fri - Sun: These last days are spent on completing the final UML/Domain Model and polishing/implementing any final frontend/backend features to improve the quality of our Milestone 2 product.

MILESTONE 2

Meeting Minutes #6

6/07

Attendees

- Denver
- Ed
- Jiaqi
- Adrian

Discussion points

- Review starter code
 - What interacts with what and where
 - Noticed a lot of issues with loopmanaworld requiring interaction

- Update UML
 - Created basic methods and attributes for diagram model

Actions items

- Start unit and integration test

Meeting Minutes #7

7/07

Attendees

- Denver
- Ed
- Jiaqi
- Adrian

Discussion points

- Allocate unit and integration test workload
 - Denver - basic enemy, enemy building
 - Ed - Character
 - Jiaqi - ally building + trap,
 - Adrian - card, heroes castle/shop, items,
- Create key entity files and commit for merge

Actions items

- Complete unit and integration test for allocated tasks

Meeting Minutes #8

12/07

Attendees

- Denver
- Ed
- Jiaqi
- Adrian

Discussion points

- Character and item/card unit tests and functionality completed
- Discuss battle and loop mania world

Actions items

- Continue working on individual tests

Meeting Minutes #9

13/07

Attendees

- Denver
- Ed
- Jiaqi
- Adrian

Discussion points

- Discuss basic enemy, enemy building
- Discuss ally building + trap
- Deciding ordering for loop mania world functions

Actions items

- Continue working on individual tests

Meeting Minutes #10

14/07

Attendees

- Denver
- Ed
- Jiaqi
- Adrian

Discussion points

- Discuss demonstration split
 - Adrian - UML + Items
 - Ed - frontend + Menu and control
 - Jiaqi - Planning + Allied Buildings
 - Denver - Assumptions + Enemies + progression
- Demonstration points:
 - Storyboard - 30%
 - Progression
 - Enemies
 - Items
 - Allied Buildings
 - Menus and Controls
 - Frontend - 20%

- UML - 20%
- Assumptions - 10%
- Planning - 20%
- Questions:
 - Storyboard
 - Are these good user stories? What can we do to improve them?
 - UML
 - Is our design good? How can we improve it?
 - Milestone 2: How much functionality of backend ends to be completed and will there be autotests or something to compare it against?
 - Git practices: Do we need to integrate our own pipeline into the project? Is there a way to automate Junit to display coverage?

Actions items

- Loop mania controller:
 - Factor path and nonpath buildings
 - Factor unequipped and equipped inv item placements
 - Onloading cards, items, gold + changing draggable types
 - Upload rest of images within constructor
 - Set menu switches for berserker and survival mode
- Loop mania world:
 - Buildings → interaction (spawning + stats) + analyse buildings
 - Generating gold/exp/cards/items for excess
- Hero's castle: Buy and sell methods with consideration to the game modes
- Writing unit and integration tests for loop mania world
- Add other interaction menus to the LoopManiaApplication.java
- Front end
 - Create shop menu screen and link buttons with backend
- Ensure at least 3 design patterns
 - Observer -> trap + vampire
 - Strategy →
- Update UML + Planning
- Code style

Meeting Minutes #11

16/07

Attendees

- Danver
- Ed
- Jiaqi
- Adrian

Discussion points

- Discuss demonstration split
 - Adrian - UML + Items
 - Ed - frontend + Menu and control
 - Jiaqi - Planning + Allied Buildings
 - Danver - Assumptions + Enemies + progression
- Demonstration points:
 - Storyboard - 30%
 - Progression
 - Enemies
 - Items
 - Allied Buildings
 - Menus and Controls
 - Frontend - 20%
 - UML - 20%
 - Assumptions - 10%
 - Planning - 20%

What our progress has been:

Adrian: Have been able to write the preliminary tests for items. Still need to implement Weapons and armour

Jiaqi: Made progress on the goals and game modes

Edward: Made more progress on connecting the frontend with the backend via the controller and LoopWorldMania. Have been able to upload the images and create switch cases to determine the different types of class types.

Danver: Made more assumptions about the enemy and character interactions in runBattles. Still need to consider the support allies and support buildings.

What question and discussion points we have:

Danver: What are some of the relationships between

Jiaqi: How can we keep our tests more succinct? Is there a way to set up tests?

Adrian: What are some other design patterns that we can utilise?

What we are planning to do:

Adrian: LoopWorldMania Tests -> Unit and Integration

Edward: LoopWorldManiaController and Frontend

Danver: Enemy implementations of Zombie and Vampire with activate ability

Jiaqi: Enemy and Support building relationships. Possible restructuring to cater for the requirements of the Campfire and the Tower in terms of the character.

Meeting Minutes #12

18/07

Attendees

- Danver
- Ed
- Jiaqi
- Adrian

Key Goals and Marking Criteria to consider

- o Frontend - 20%
- o UML - 20%
- o Assumptions - 10%
- o Planning - 20%

What our progress has been:

Almost implementing all backend features, and tests for individual entities.

What question and discussion points we have:

Adrian: How can we design the relationship between items in battle better?

What we are planning to do:

Modify frontend to meet our design in milestone 1. Update UML with the final version of the project. Do more tests on Loop Mania World.

- Get project to compile
- Get online coverage, check which part needs more testing -> Gradle
- Get more tests for areas need - 1h Testing(20%)
- Frontend just need to get some working smoothly - Frontend(15%)
- All - Creating Task board and minutes - 25m ProjectManagement(10%)
- All - Add Assumptions - 10m Backend(30%)
- All - Get the final version of the Project, update UML accordingly (patterns) - 40m UML(25%)

Task board for Milestone 2 (object timeline)

Task #	Main goal	Task Description	Delegated to	Deadline
1, 2	Understanding how the starter code work / structured	<ol style="list-style-type: none"> 1. Check the starter code of project, getting familiar with the project. 2. Having group discussion about the class and subclass of buildings, items, card, enemy and how to implement them. 	Ed, Danver, Jiaqi, Adrian to all do on Monday	9/07
1, 2	Understanding how the starter code work / structured	<ol style="list-style-type: none"> 3. Check the starter code of project, getting familiar with the project. 4. Having group discussion about the class and subclass of buildings, items, card, enemy and how to implement them. 	Ed, Danver, Jiaqi, Adrian to all do on Monday	11/07
1, 2	Come to a mutual agreement of what method is best for what class and what can be done to improve the structure.	Group discussion of what method each super class should have, and type in UML for future reference when implementing the backend.	Ed, Jiaqi, Adrian, Danver	12/07
1, 2	Assign the task to group members.	Adrian - card, heroes castle/shop, items, Danver - basic enemy, enemy building Ed - Character Jiaqi - ally building + trap	Ed Jiaqi Danver , rian	13/07
1, 2	Further implementation and discussion of more specific details	<ol style="list-style-type: none"> 1. Talk about how ally will be implemented. 2. Set the building as the abstract class for every building 	Danver Ed Jiaqi - (Sword), Adrian	14/07
1, 2	Trying implement design pattern usage in UML	Things to consider include: Inheritance & Interface Design, strategy pattern, observer pattern, composite pattern etc. Such as observer pattern between vampire and campfire or composite pattern for goals as complex goals are made up of simple goals.	Ed, Danver, Jiaqi, Adrian to all do on Monday	15/07
3	Document assumptions	Document all assumptions that you think your implementation will need to make about the requirements. Remember that good assumptions clear up an ambiguity in the specification by	Ed, Danver, Jiaqi, Adrian to do as we	16/07

		articulating a behaviour (what a particular feature/rule of the game is) rather than an implementation (how it will be programmed). Assumptions should only be used to clarify genuine ambiguities and should not reduce the scope of the specification.	move along each day	
4	Write more tests to all implementation	Finish implementation to all entities in LoopmaniaWorld, modify tests to be able to test for randomness, modify the structure of items.	Ed, Danver, Jiaiq, Adrian	17/07
5	Write more tests to all implementations and update the frontend to our design.	Finish implementation to all entities in LoopmaniaWorld, modify tests to be able to test for randomness, modify the structure of items.	Ed, Danver, Jiaiq, Adrian to do on thurs	18/07
	Update UML Update assumption Final touches files ready to be submitted.	<ol style="list-style-type: none"> 1. Implement the frontend for LoopmaniaWorld, increase the test coverage on building things 2. Updates all setters, getters, methods into UML. 	Ed, Danver, Jiaiq, Adrian to do on Mon 10am	19/07