

# Project Timeline

Key:	
Ed	
Danver	
Jiaqi	
Adrian	
ALL	

	Monday	Tues	Wed	Thurs	Fri	Sat	Sun
<b>Week 4 (21/06)</b>			<i>Standup</i>	<i>Standup</i>	<i>Standup</i>		<i>Standup</i>
			Read spec	Read spec	Began timelining		Construct User Stories
<b>Week 5 (28/06)</b>	<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 assumpti ons		
					<b>Milestone 1 DUE</b>		
<b>Week 6 (5/07)</b>	<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 integratio n tests for Path Buildings	Write integratio n 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: body Armour, shield, helmet	Write integration tests for Enemies: slug, zombie	Write integration tests for armor: amour, shield, helmet		
		Review assumptions and domain model	Review assumptions and domain model	Review assumptions and domain model	Review assumptions and domain model		
<b>Week 7 (12/07)</b>	<i>Standup</i>	<i>Standup</i>		<i>Standup</i>	<i>Standup</i>		
	Implement Path Buildings	Implement Path Buildings	Implement Shop	Implement FrontEnd	Complete UML + domain model	Complete UML + domain model	Sprint Planning End
	Implement Other Buildings	Implement Other Buildings	Implement Healing and difficulties	Implement FrontEnd	Keep implementing front/backend features	Keep implementing front/backend features	
	Implement	Implement Enemies	Implement Weapons	Implement	Polish Milestone	Polish Milestone	

	Enemies			FrontEnd	#2 requirements	#2 requirements	
	Implement Enemies	Implement Enemies	Implement Armour	Implement FrontEnd			
			Ensure complete test coverage	<b>Demonstrate Milestone 1</b>	Ensure complete test coverage	Ensure complete test coverage	
<b>Week 8 (19/07)</b>	<i>Standup</i>		<i>Standup</i>	<i>Standup</i>	<i>Standup</i>		
	<b>Milestone 2 DUE</b>			<b>Demonstrate Milestone 2</b>			
<b>Week 9 (26/07)</b>	<i>Standup</i>	<i>Standup</i>	<i>Standup</i>	<i>Standup</i>	<i>Standup</i>		
			Writing tests in loopMania World and building for coverage	Adding test to tower and village	Adding background music	Adding sound effect	Updating UML and modification of sound effect
	Added Ally in the frontend	Writing tests in LoopManiaWorld for coverage	Implementation of frontend selling ability	Implementation of modes and rare item test	Adding frontend of settings menu	Implementing character traits frontend and backend	Boss goal and doggie coin implementation and tests
	Implementation of hero's castle menu	Implementation of goals	Getting coverage up	Making map menu	Implementation of game play speed	Implementation and tests for staff	Game interface
	Changing better pictures	Fixing all code style	Implementation and test of Doggie.	Implementation and test of Elan.	Implementation and test of sniper.	Implementation and test of nuke. And fixing tests in Loopmania	Fixing tests in Loopmania world.java to get higher

						word	coverage
	Updating User story	Ensure complete test coverage	Ensure complete test coverage	Ensure complete test coverage	Ensure complete test coverage	Ensure complete test coverage	Ensure complete test coverage
Week 10 (2/08)	Standup	Standup	Standup	Standup	Standup		
	Milestone 3 DUE			Demonstrate Milestone 3			
Week 11 (9/08)	Standup						

## Task board for Milestone 3 (object timeline)

Main goal	Task Description	Delegated to	Date	Deadline
Reading milestone3 specification, completing unfinished tasks from mileStone 2	Completing leftover tasks from milestone 2, such as implementing allied soldiers on the frontend (show how many), changing tests due to new features such as enemy movement (halt) when character is in battle radius. Uncompleted tasks: Goals, Hero's castle, the one ring, game modes, health potion. Debugging frontend.	Ed Danver, Jiaqi, Adrian	25/7	30/7
Allocating more tasks from milestone 2	Allocating tasks, Ed and Adrain (Hero's castle), Danver (Goals), Jiaqi (Health potion, the one ring)	Ed Danver, Jiaqi, Adrian	28/7	1/8
Getting a clear view of the task in milestone3 we need to do and plan ahead	Brainstorming extension ideas and ranking them from the most marks gained and easiest to do. And listing remaining task and allocating / splitting among group members.	Ed Danver, Jiaqi, Adrian	29/7	2/8
Implementing extensions	Adding sniper rifle, implementing staff ability and tests, adding background music, changing pictures,	Ed Danver, Jiaqi,	30/7	2/8

		Adrian		
Continuing implementation of extensions	Adding nuke and testing, implementing game speed extension, implementing character animation of movement, zombie animation of movement, implementing sound effect.	Ed Danver, Jiaqi, Adrian	31/7	2/8
Polishing what is already implemented, assuring there's no bug.	Adding final assumptions, updating final version of uml, adding patterns, attributes and functions. Getting test coverage to 90%. Update the UML. Implement changing goals in the menu. Make a button to change game speed. Display the goal on frontend. Implement the character trait things. Implement the Doggie coin.	Ed Danver, Jiaqi, Adrian	1/8	2/8

#### Milestone 2 remainder:

- Consider Strat pattern for item abilities
- Staff Trance implementation
- Complete staff test

#### Hero's Castle:

- Frontend display message for:
  - Temporary window error for: Insufficient gold
  - Temporary window error for: Inventory full, cannot buy items
  - Confirmation of the item sold (maybe have are you sure?)

#### Frontend:

- Update display for current character stats (attack / defense)
- Display goals in seperate window
- Frontend display menu for game modes (standard, berserker, survival, confusing)

#### Feedback:

- Comment everything
- No single letter variable names → even for tests
- Make assumptions more detailed
- Need testing coverage → branch coverage

### Milestone 3 remainder:

Bosses:

- Elan Muske (tests/implementation)
- Doggie (tests/implementation)

Rare Items:

- Anduril, Flame of the West (tests/implementation)
- Tree Stump (tests/implementation)

Items:

- DoggieCoin (tests/implementation)
- Confusing mode (tests/implementation)
- Brainstorm other additional features to include

### Potential extra features:

- Upgrade UI, use better images -> Danver
- Set game speed option -> Adrian
- Campaign builder == custom goal option → Ed
- Music, maybe sound effect when enemies die / fighting / selling -> jiaqi
- Excess card/item labels → Ed
- ~~Add how to play section~~ → Ed
- Add settings menu
  - Game volume
  - Change game mode --> Ed
  - Game speed scrollbar/buttons
  - Save/load here?
  - Change the game goal
- Doggie coin tests and implementation

Frontend:

- Expand the main menu
- Display goals
- Display character stats
- Implementation and tests of 2 other rare items
- Image slot for ring
- Game map themes: fire, water, grass
- Save and load games

- Live label update, notifying the user of: insufficient balance, reward received,
- Three maps to choose for play
- Character traits → class → Add building gym → set after hero castle → Ed
  - Successful blocks heal +5 to character
  - Cards when placed dont destroy card
  - Passive healing per cycle completed
  - Health per kill
  - Below 65% hp take less damage
  - Increase basic damage stat
  - Sniper + 5 range
- The one ring2 (need to do a quiz at 100% to respawn)
- More maps → can be chosen -> Adrian
- Animate moving → Ed
- Add more buildings
  - Blacksmith
  -
- Battle animation
- UML - Jiaqi
- Backend testing - Denver
- Story board update → Ed, Adrian, Denver, Jiaqi
- Minutes update → task board + issues -> Denver
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#### Other:

- Update the meeting minutes
- Fix the UML diagram
- Try to reduce the size of LoopManiaWorld.java and LoopManiaWorldController.java by:
  - Deleting unnecessary methods
  - Deleting duplicate methods or methods that do a similar task
  - Abstracting methods that are unique to a class e.g. withRangeElan

meeting minutes should cover what was achieved since the last meeting, your task allocations, what you plan to achieve by the next meeting, and issues you've faced since the last meeting.

# Milestone 3

## Meeting Minutes #13

26/07

### Attendees

- Denver
- Ed
- Jiaqi
- Adrian

### Discussion points

- Review milestone2 code
  - What interacts with what and where
  - Noticed a lot of issues with loopmaneworld requiring interaction

### Actions items

- Start unit and integration test

### What we have achieved since last meeting

- None - first meeting for MileStone 3

### Task allocation

- Denver - Implementation and test for doggie
- Ed - Implementation and test for hero's castle selling item
- Jiaqi - Writing tests in loopmaneworld and buildings
- Adrian - Implementing hero's castle menu

### What we plan to achieve by next meeting

- Refer to the task board

### Issues faced since last meeting

- None - first meeting

## Meeting Minutes #14

27/07

### Attendees

- Denver
- Ed
- Jiaqi



- Adrian

#### Discussion points

- Allocate unit and integration test workload
  - Danver - Implementation and test for Elan
  - Ed - Implementation and test for game modes and rare items
  - Jiaqi - Adding more tests to tower and village
  - Adrian - Implementation and test for goal
- Create key entity files and commit for merge

#### Actions items

- Complete unit and integration test for allocated tasks

#### What we have achieved since last meeting

- The allocated tasks and understanding of requirements of milestone3

#### What we plan to achieve by next meeting

- The allocated tasks

#### Issues faced since last meeting

- None

## Meeting Minutes #15

28/07

#### Attendees

- Danver
- Ed
- Jiaqi
- Adrian

#### Discussion points

- Character and item/card unit tests and functionality completed
- Discuss battle structure to better fit changes in loop mania world

#### Actions items

- Continue working on individual tests

#### What we have achieved since last meeting

- The allocated tasks

#### Task allocation

- Danver - Implementation and test for sniper
- Ed - Implementation for frontend settings menu
- Jiaqi - Implementation for background music

- Adrian - Implementation for changing game speed

What we plan to achieve by next meeting

- The allocated tasks

Issues faced since last meeting

- None

## Meeting Minutes #16

29/07

Attendees

- Danver
- Ed
- Jiaqi
- Adrian

Discussion points

- Discuss boss behaviour
- Discuss new item and overall game balance

Actions items

- Continue working on individual tests

What we have achieved since last meeting

- The allocated tasks

Task allocation

- Danver - Implementation and test for nuke
- Ed - Implementation and test for character trait
- Jiaqi - Adding sound effect to the game
- Adrian - Implementation and test for staff

What we plan to achieve by next meeting

- The allocated tasks

Issues faced since last meeting

- None

## Meeting Minutes #17

30/07

## Attendees

- Danver
- Ed
- Jiaqi
- Adrian

## Discussion points

- Discuss demonstration split
  - Adrian - UML + Items(staff)
  - Ed - frontend + Menu and control
  - Jiaqi - Planning + Sound effects
  - Danver - Assumptions + Boss + 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 3r: 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 4 design patterns
  - Observer -> trap + vampire
  - Strategy →
- Update UML + Planning
- Code style

What we have achieved since last meeting

- The allocated tasks

Task allocation

- Danver - Fixing tests and getting coverage up
- Ed - Implementation and tests of boss goal
- Jiaqi - Adjustment of volume of the background music and sound effect, moving all sound effect function to frontend so it won't interrupt testing
- Adrian - Implementation of game interface

What we plan to achieve by next meeting

- The allocated tasks

Issues faced since last meeting

- None

## Meeting Minutes #18

31/07

Attendees

- Danver
- Ed
- Jiaqi
- Adrian

Discussion points

- Discuss demonstration split
  - Adrian - UML + Items
  - Ed - frontend + Menu and control

- Jiaqi - Planning + Music
- Danver - Assumptions + Boss + 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 more preliminary tests for items.

**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.

**Danver:** Made more assumptions about the boss and character interactions in runBattles.

**What question and discussion points we have:**

**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:** Sniper and nuke tests and debug

**Jiaqi:** Writing more test in LoopManiaWorld for coverage

**Issues faced since last meeting**

- None

## Meeting Minutes #19

1/08

**Attendees**

- Danver
- Ed
- Jiaqi
- Adrian

**Key Goals and Marking Criteria to consider**

- Frontend - 20%
- UML - 20%
- Assumptions - 10%
- 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 2. Update UML with the final version of the project. Do more tests on Loop Mania World. Update assumptions and user stories.

**Task allocation**

- Jiaqi - updating UML
- Danver - fixing code style, coverage
- Adrian - debugging, writing more tests, adding new maps
- Ed - implementation and test for doggie coin

**Issues faced since last meeting**

- How many additional features should we have?
- Where can we gain the most marks based on criteria points?
-