Requirements and Analysis Document for group 16

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v1.0

1 Introduction

We have indentified a huge gap in the world of clicker games, namely Lord of the Rings based clicker games. Our project aims to fill that gap.
This game will simulate the adventure of Frodo and friends on their quest to destroy the one ring, and will benifit anyone who likes both LOTR and clickers. This game might be useful on the bus, to pass the time when moving between locataions, or when sitting on the toilet.

1.1 Definitions, acronyms, abbriviations

LOTR: Lord of the Rings.

2 Requirements

2.1 User interface

2.2 Functional requirements

- Attack
- Open map
- Use map
- Buy upgrades
- Go home
- Improve home
- Check stats

2.3 Non-functional requirements

2.3.1 Usability

This will be a mobile game so we should put extra emphasis on the game being as intuitive as possible.

2.3.2 Performance

The game should be light on resources.

2.3.3 Implementation

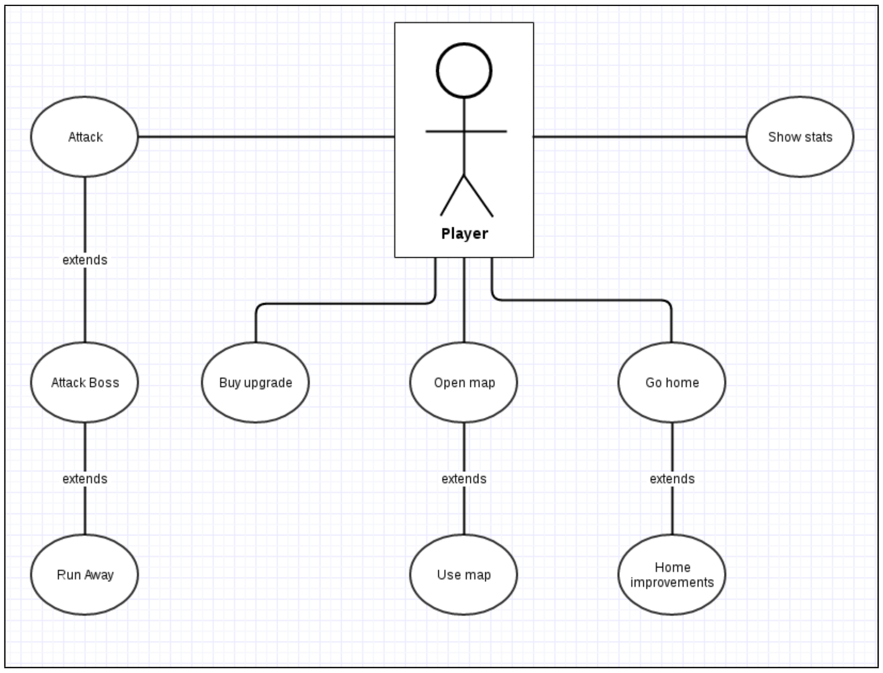
The application will be written in Java.

2.4 Packaging and installation

The application will be distributed as an *.apk-file.*

3 Use cases

3.1 Usability model



3.2 Use case listings

3.2.1 Use case: Open app

Summary: The user opens the app
Priority: High
Extends:
Includes:
Participators: User
Normal flow of event: *The user opens the app and the game displays the main menu.*

	Actor	*System*
1	*User clicks app icon*	
2		*Load game*
3		*Display main menu*

3.2.2 Use case: Attack

Summary: The user clicks the screen and the game calculates new health for the monster.
Priority: High
Extends: undefined
Includes: undefined
Participators: Player
Normal flow of event: *The player attacks the monster and the monster survives.*

	Actor	*System*
1	*Player clicks screen*	
2		*Attack animation plays*
3		*Calculate new health for monster*

Alternate flow: *The player attacks the monster and the monster dies. The level is not cleared.*

	Actor	*System*
1	*Player clicks screen*	
2		*Attack animation plays*
3		*Calculate new health for monster*
4		*Death animation plays*
5		*Replace dead monster with new monster*
6	*Player gets money*	

Alternate flow: *The player attacks the monster and the monster dies. The level is cleared.*

	Actor	*System*
1	*Player clicks screen*	
2		*Attack animation plays*
3		*Calculate new health for monster*
4		*Death animation plays*
5		*Replace dead monster with new monster*
6		*The option to change level is made avliable*
7	*The player gets money*	

3.2.3 Use case: Attack boss

Summary: The player is fighting a boss
Priority: High
Extends: Attack
Includes:
Participators: Player
Normal flow of event: *The player attacks the boss and defeats it within the time frame*

	Actor	*System*
1	*Player clicks screen*	
2		*Attack animation plays*
3		*Calculate new health for boss*
4		*Death animation plays*
5		*Unlock next level*
6		*Reset boss*
7	*Player gets money*	

Normal flow of event: *The player attacks the boss and does not defeat it, but is still within the time frame.*

	Actor	*System*
1	*Player clicks screen*	
2		*Attack animation plays*
3		*Calculate new health for boss*

Alternate event: *The player does not defeat the boss within the time frame*

	Actor	*System*
1		*Reset boss*

3.2.4 Use case: Run away

Summary: The player wants to run away from the fight.
Priority: Medium
Extends: Attack boss
Includes:
Participators: Player
Normal flow of the event: *The player clicks the "run away" button.*

	Actor	*System*
1	*The player clicks the button*	
2		*Sends the player to Home*

3.2.5 Use case: Open map

Summary: The player clicks the button labeled "map" Priority: Medium
Extends: undefined
Includes: undefined
Participators: Player
Normal flow of event: *The player clicks the button labeled "map"*

	Actor	*System*
1	*Player clicks on the button*	
2		*Displays map page*

3.2.6 Use case: Use map

Summary: The user tries to move to a different level.
Priority: High
Extends: undefined
Includes: undefined
Participators: Player
Normal flow of event: *The player clicks on the level they want to move to, the level is unlocked.*

	Actor	*System*
1	*Player clicks on the level*	
2		*Checks that the level is unlocked*
3		*Loads new level*

Alternate flow of event: *The player clicks on the level they want to move to, the level is locked.*

	Actor	*System*
1	*Player clicks on the level*	
2		*Checks that the level is unlocked*

3.2.7 Use case: Show stats

Summary: The use clicks the button labeled "Stats"
Priority: low
Extends: undefined
Includes: undefined
Participators: Player
Normal flow of event: *The player clicks the button labled "Stats"*

	Actor	*System*
1	*Player clicks on the button*	
2		*Displays stats page*

3.2.8 Use case: Go home

Summary: The user wants to go home
Priority: Low
Extends: undefined
Includes: undefined
Participators: Player
Normal flow of event: *The player clicks the button labeled "Home"*

	Actor	*System*
1	*Player clicks on the button*	
2		*Displays the player home screen*

3.2.9 Use case: Home improvements

Summary: The user wants to improve their home
Priority: low
Extends: undefined
Includes: undefined
Participators: Player
Normal flow of event: *The player wants to buy an animal, has enough money and enough space.*

	Actor	*System*
1	*Player clicks on a buy animal button*	
2		*Deduct money from player*
3		*Add animal to home*

Alternate flow: *The player wants to buy more space, has enough money.*

	Actor	*System*
1	*Player clicks on button*	
2		*Deduct money from player*
3		*Add more space to player*

Alternate flow: *The player wants to sell an animal, has animals.*

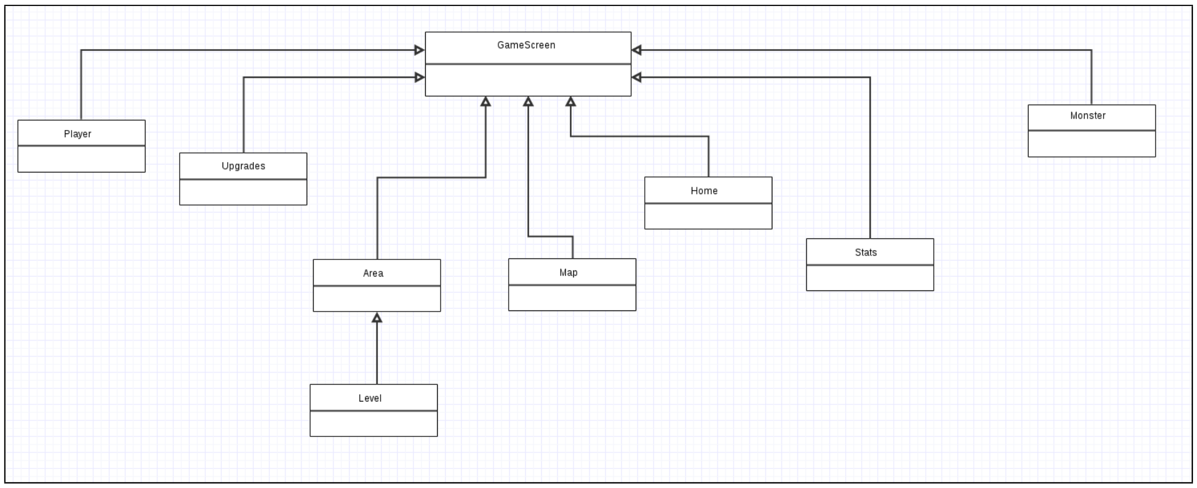
	Actor	*System*
1	*Player clicks button*	
2		*Remove one animal from player*
3		*Add money to player*

3.2.10 Use case: Buy upgrade

Summary: The user is home and wants to buy an upgrade.
Priority: Medium
Extends: undefined
Includes: undefined
Participators: Player
Normal flow of event: *The player clicks on the upgrade and has enough money.*

	Actor	*System*
1	*Player clicks on the upgrade*	
2		*The upgrade is applied to the player*

4 Domain model



4.1 Class responsibilities

4.1.1 Game screen

Combines all other classes into one unified interface.

4.1.2 Player

The actual player. Has money, animals, space, and an amount of damage.

4.1.3 Monster

A bad guy. Has health points, and an amount of money to drop.

4.1.4 Stats

A view for the players stats.

4.1.5 Map

A view for a map over the levels that a player can travel to.

4.1.6 Upgrades

A view over the upgrades that a player can buy.

4.1.7 Home

The players home. Here the player can buy animals which earn passive money.

4.1.8 Area

An area, has a name, and a list of levels associated with that area.

4.1.9 Level

Determines how hard the monsters are, and how much money they drop.

5 References

No references yet.