# Maze-Escape

Game-plan

It starts with a menu, where the player can choose what he wants to do. The game consists of a maze, where the player has to exit the maze to win the game. There is a timer to see how well the player does. The timer will save the time as the high score and is on display for the player. In the game, there is a fog of war and traps. The fog of war is to keep the traps hidden from the player. The traps increase the time. The player can move his avatar with four buttons (up, down, left, right) the avatar can't walk through walls and starts in the middle of the maze.
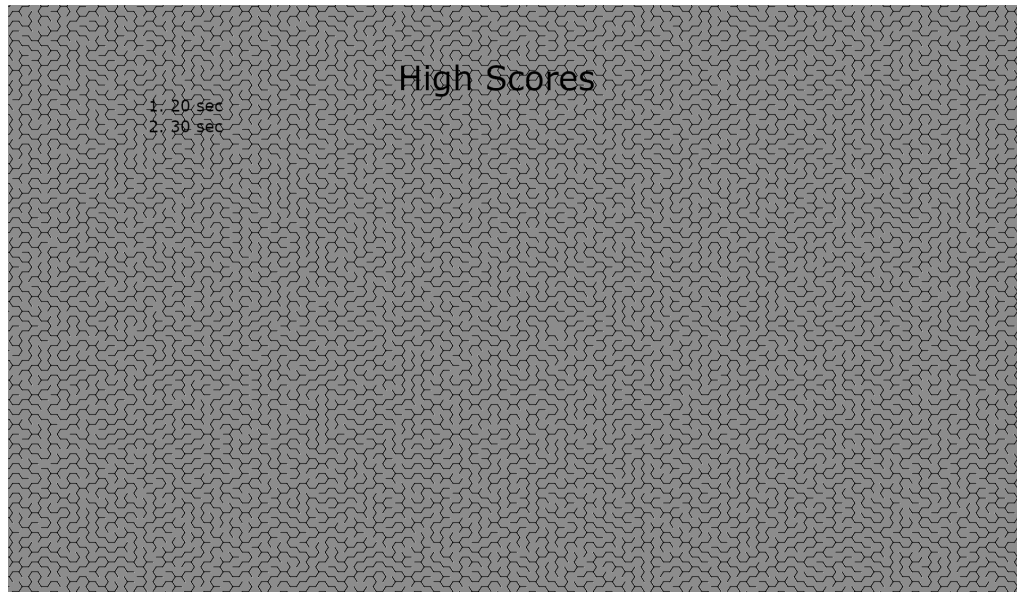
Sketches

Main menu
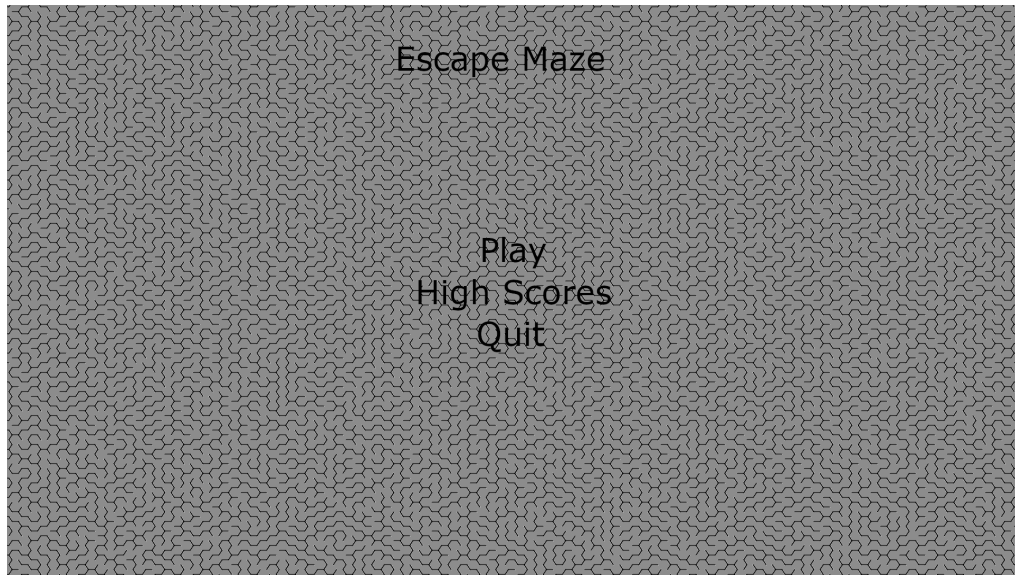
Main game
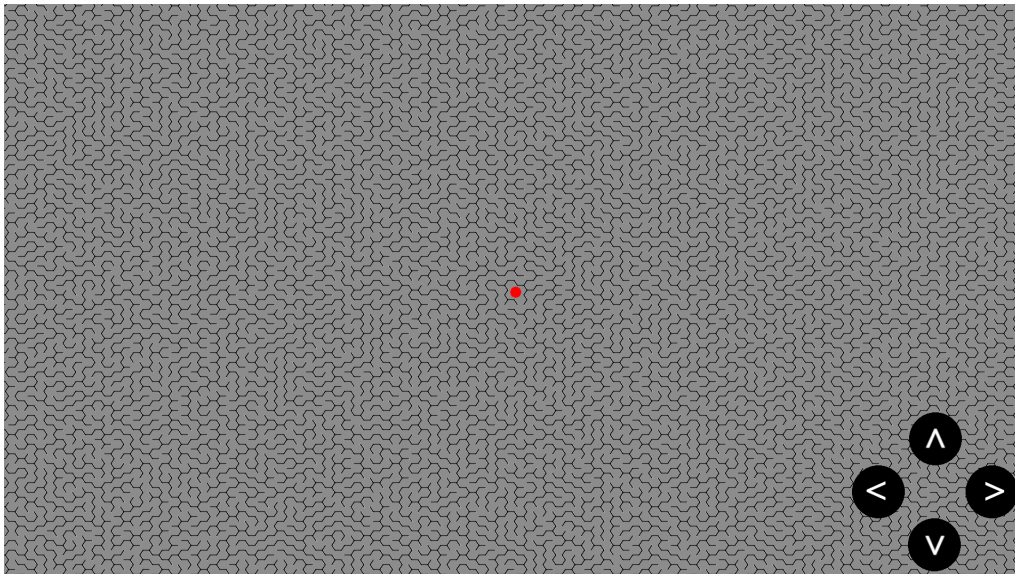
High scores

Use case description

Number and name	= UC1: movement

Summary	= the user sends a movement command
Actors	= the Player
Precondition	= the game has finished loading
Main scenario	= 1. one of the four movement buttons is pressed
	2. system send movement input to character data
Postcondition	=the character has received data telling in which direction it needs to move
Alternative	= ----

Number and name	= UC2: main menu
Summary	=menu that appears when the app starts up
Actors	= the Player
Precondition	= the app has started up and finished loading
Main scenario	= 1. the play button is pressed
	2. the app loads a maze
	3. when the maze is finished loading start timer
Postcondition	= the maze is loaded and the player can start playing the game
Alternative	= 2a. The player presses high score
	2a1. Gather high scores from the database
	2a2. Sort high scores
	2a3. List sorted high scores
	2b. The player presses the quit button
	2b1. The game shuts down

|	
Number and name	= UC3: wall interaction
Summary	= the player-controlled character can't go through walls
Actors	= the controlled character
Pre-scenario	= thecontrolled character receives a movement command
Main scenario	= 1. the controlled character tries to move in a direction
	2. app check If the chosen direction has a wall
	3. system returns that there is a wall
	4. movement is canceled
	5. send debug message telling a wall has been hit
	6. check if player has already received a message telling a wall has been hit
	7. if not, send message to player, you can't go through walls
Postcondition input	= character moves one step in dependant on the send movement
Alternative	= 3a. There is no wall
	3a1. The movement is allowed
	7a. Message has already been sent
	7a1. no message is sent to the player

Number and name	= UC4: detecting the game has been won
Summary	= checks if the game has been won
Actors	= the controlled character, the player
Pre-scenario	= the controlled character has moved
Main scenario	= 1. Chech if standing on victory grid
	2. send message that character has reached the exit
	3. stop the timer
	4. send victory message to the player.
	5. send player to high score
Postcondition input	= character moves one step in dependant on the send movement
Alternative	= 2a. Not the victory grid, continuing game

User stories

1. As a player I want the game to start loading so I can begin playing the game
2. As a player I want to be able to see the high scores so I can see the current high scores
3. As a player I want to be able to exit the game so I can stop playing.
4. As a developer I want to have a pre-drawn maze so we can be sure the can be won.
5. As a player I want to have a set of four buttons that orders the controlled character to move in one of the four direction, left, right, up, down so the controlled character can be send moved.
6. As a developer I want the controlled character to move when given the order so the character can move
7. As a player I want a timer so I can see how good I did
8. As a developer I want the timer to start after the game is done loading so the timer gives an accurate score.
9. As a player I want the timer to stop when the game is won so I can get a score
10. As a developer I want the time in the timer to be recorded so it can be used as a high score

11. As a developer I want the controlled character to interact with the walls so the player actually has to walk through the maze.
12. As a developer I want to have a character that the player can control so the player can see where in the maze they are
13. As a developer I want to have a field of vision mechanic so that the player is challenged
14. As a developer I want to have traps in the maze so that the player is challenged
15. As a developer I want to make hitting the traps increase the value in the timer so there is a punishment for hitting traps
16. As a developer I want to have a specific point marked as an exit to the maze so the game can be won
17. As a player I want an option menu in which textures can be changed so the game can be customized to my preference.
18. As a player I want a pause button so I can take a break.
19. As a player I want a resume button so I can continue playing after my break
20. As a developer I want the game to pause after tabbing out so the game is paused while not being used.

Backlog
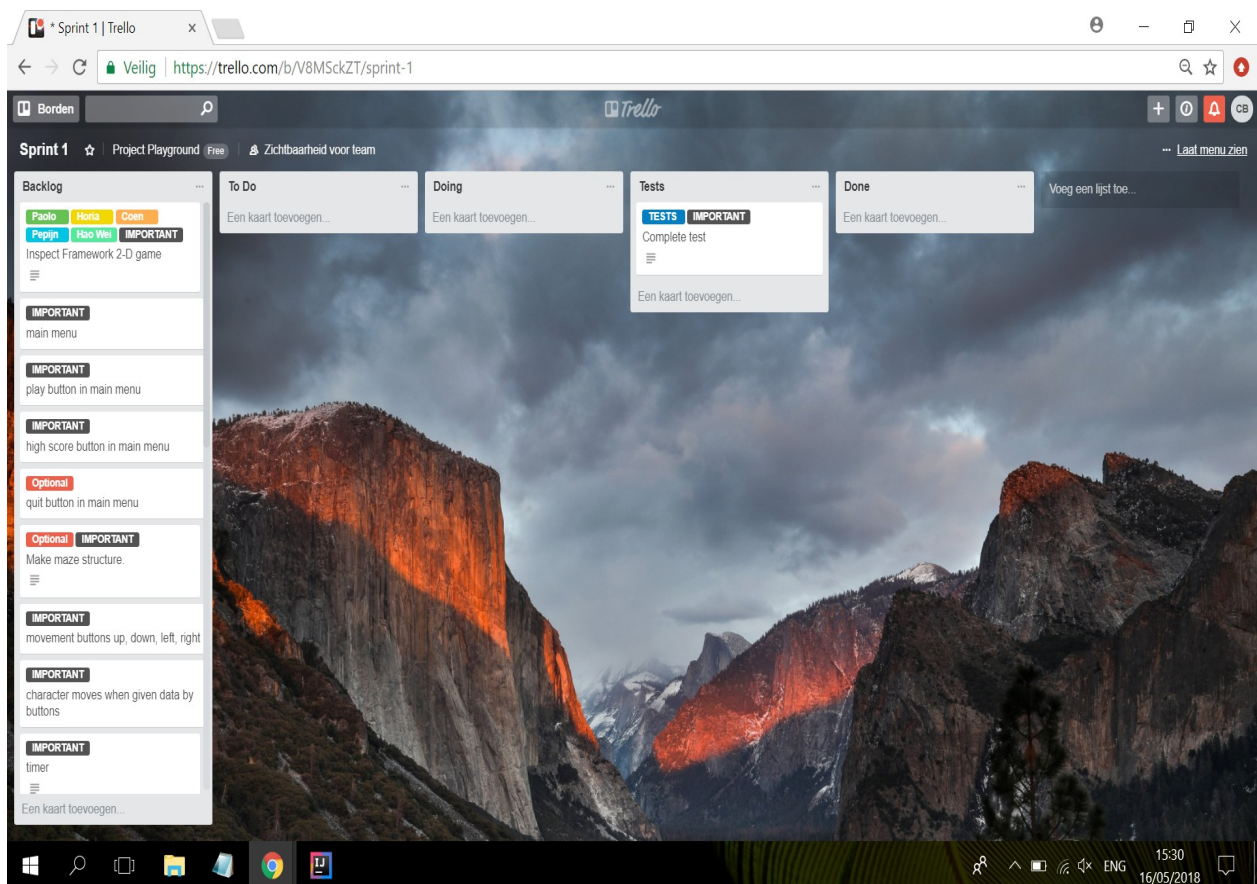
Paolo: Domain Model
Pepijn : Sketches
Coen   : Backlog/user-stories
Hori   : Use case description/domain model
Haowei: Activity Diagram/ScrumMaster

Working Agreements

- 2 weekly meetings on Monday and Wednesday during the classes.
- Each person works on their assigned task/user-story on their own time
- An additional meeting will be held if it's needed.
- For communication WhatsApp and Discord will be used because of the flexibility and possibility to share screen.

Domain model
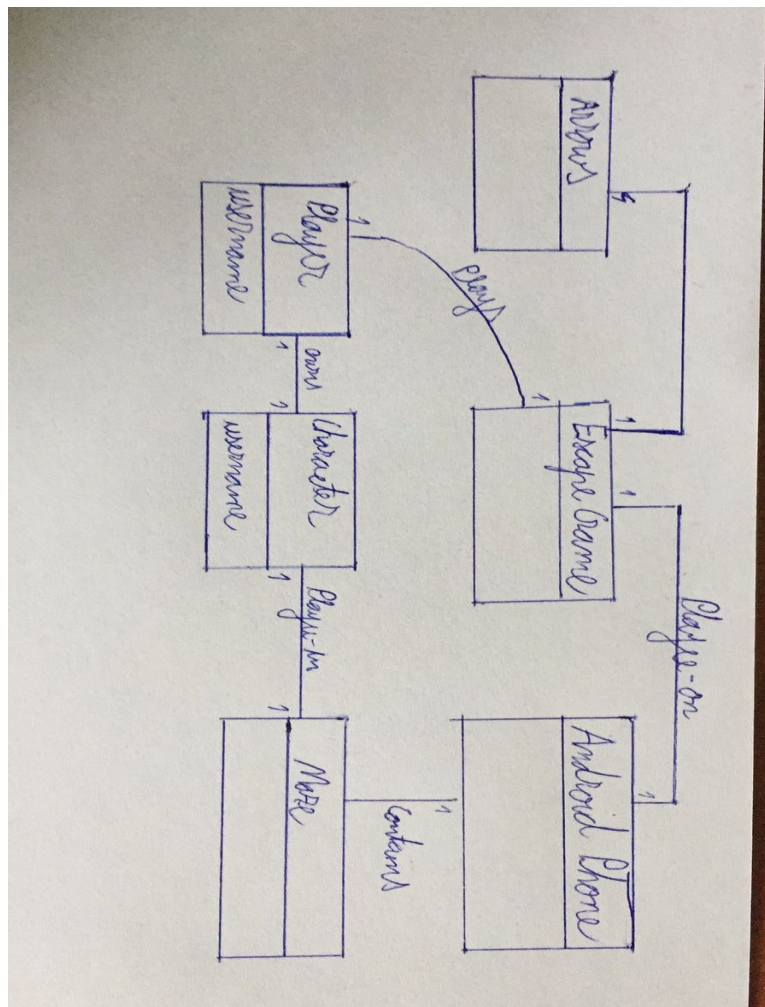
Activity Daigram
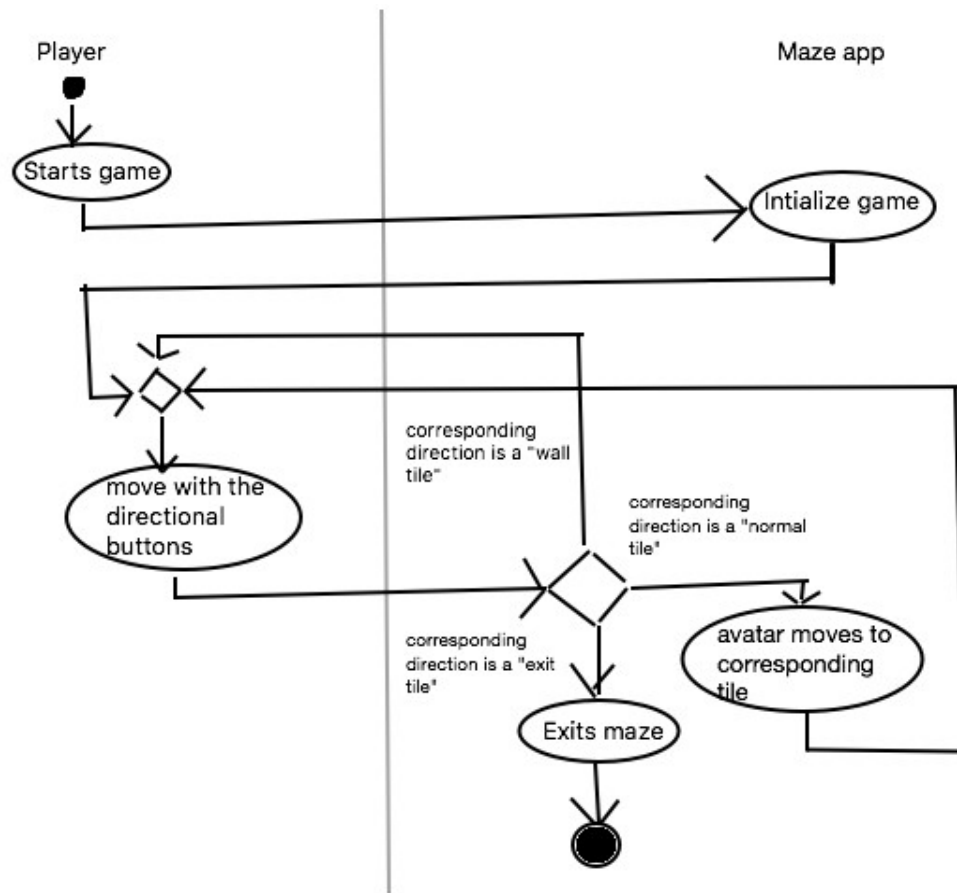
Definition of Done

- Task should be completed and documented.
- Tested by another teammate.