

Plumbers on ICE

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Requirements

Requirement #	Description
GP0	There will be a character select screen in single and/or multiplayer mode that will allow the player to choose from the available skins.
GP1	Additional skins that have been purchased will be available at character select.
GP10	A countdown will be issued at the beginning of each match whether single or multiplayer mode that indicates the race is about to start.
GP11	There will be a finish line at the end of each level that, after it is crossed, will end that level.
GP20	The player will have the ability to issue a jump command.

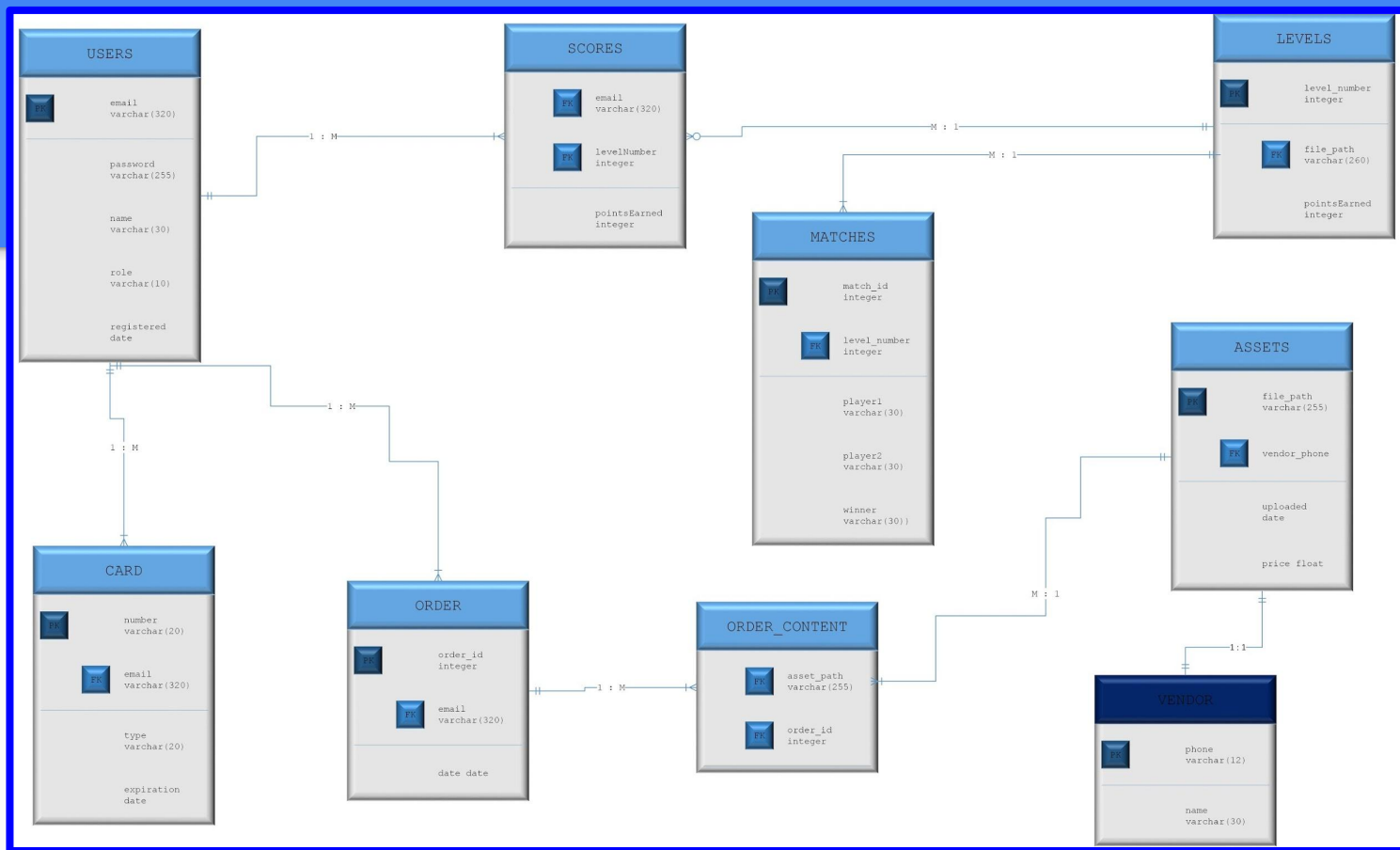
Requirements (continued)

GP30	The player will have the ability to climb ladders.
GP40	When coming into contact with an enemy, the player will respond by either taking damage or being stunned.
GP50	The player will have access to at least 5 different levels, each with a different look and feel: tropics, ice/snowy, spooky, castle, and basic/meadow.
GP60	Each level will have a distinct tune that plays in the background and repeats.
E31	The engine must be able to differentiate between the player and enemy sprites, and apply the appropriate forces based on the context.

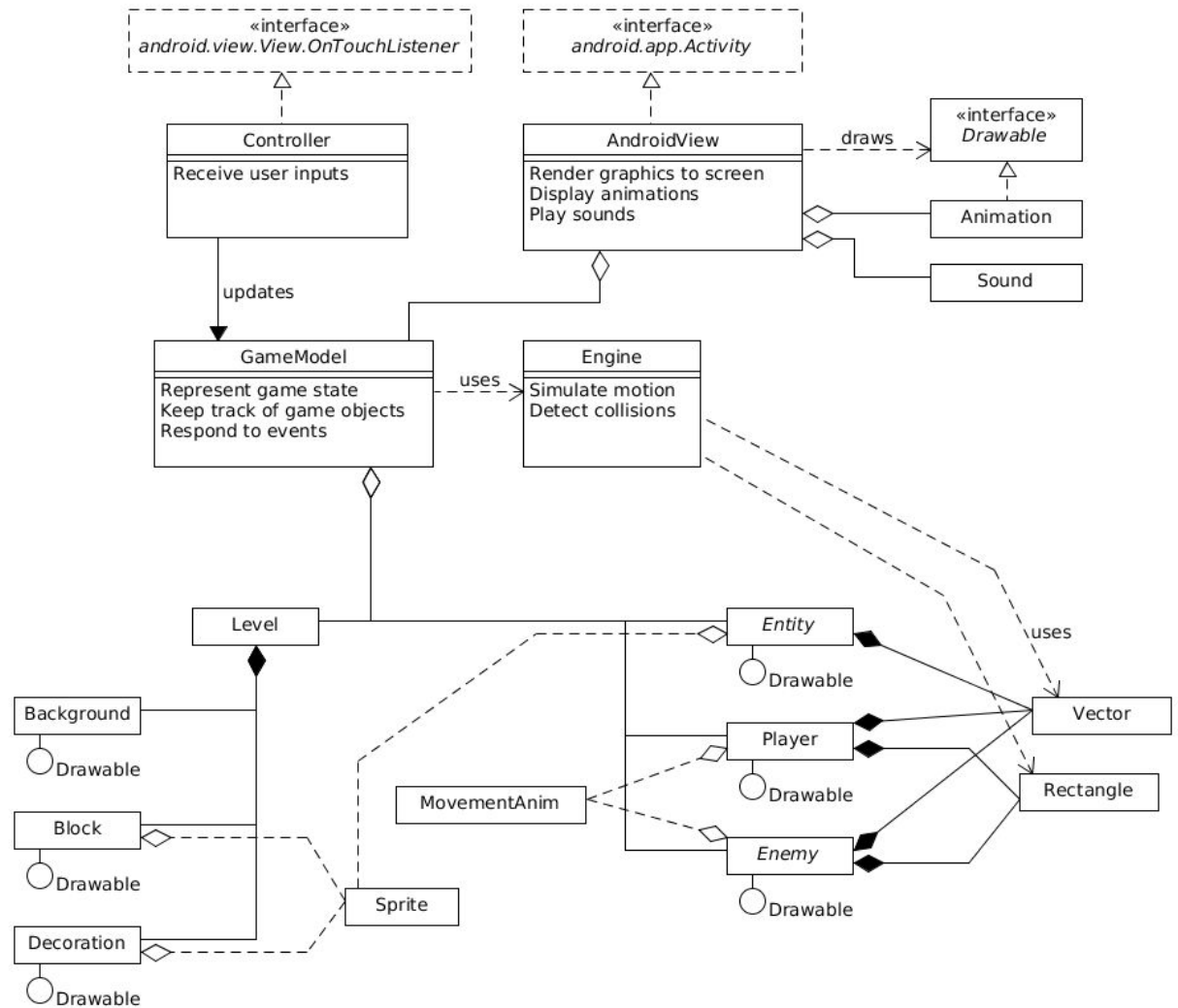
Requirements (continued)

AI10	Enemy behavior will begin as the player reaches that point in the map and continue until they reach a specified distance away from the enemy.
AI20	Enemy behavior will be the same for each type of enemy. Multiple enemies of the same type will behave the same.
AI21	The frequency of enemy movement will vary.
AI30	Enemy behavior will be constant and without regard to player movement.
AI40	Enemies will be able to inhabit terrain that the player cannot touch.
AI50	Enemies will circumvent the dynamics of player movement.
E31	The engine must be able to differentiate between the player and enemy sprites, and apply the appropriate forces based on the context.

ERD



Class diagram



Plumbers On ICE web sign-in

Plumbers On ICE

username:

password:

login

Plumbers On ICE web score board

Kong Vue

select a level

- Level 1
- Level 2
- Level 3**
- Level 4
- Level 5

logout

Plumbers On ICE

score board

Kong:	12,456 points
Jamil:	10,877 points
Chris:	9,657 points
David:	3,464 points

5 game levels

*All levels will have a unique midi theme soundtrack

Level 1: Grassy

Level 2: Icy

Level 3: Spooky

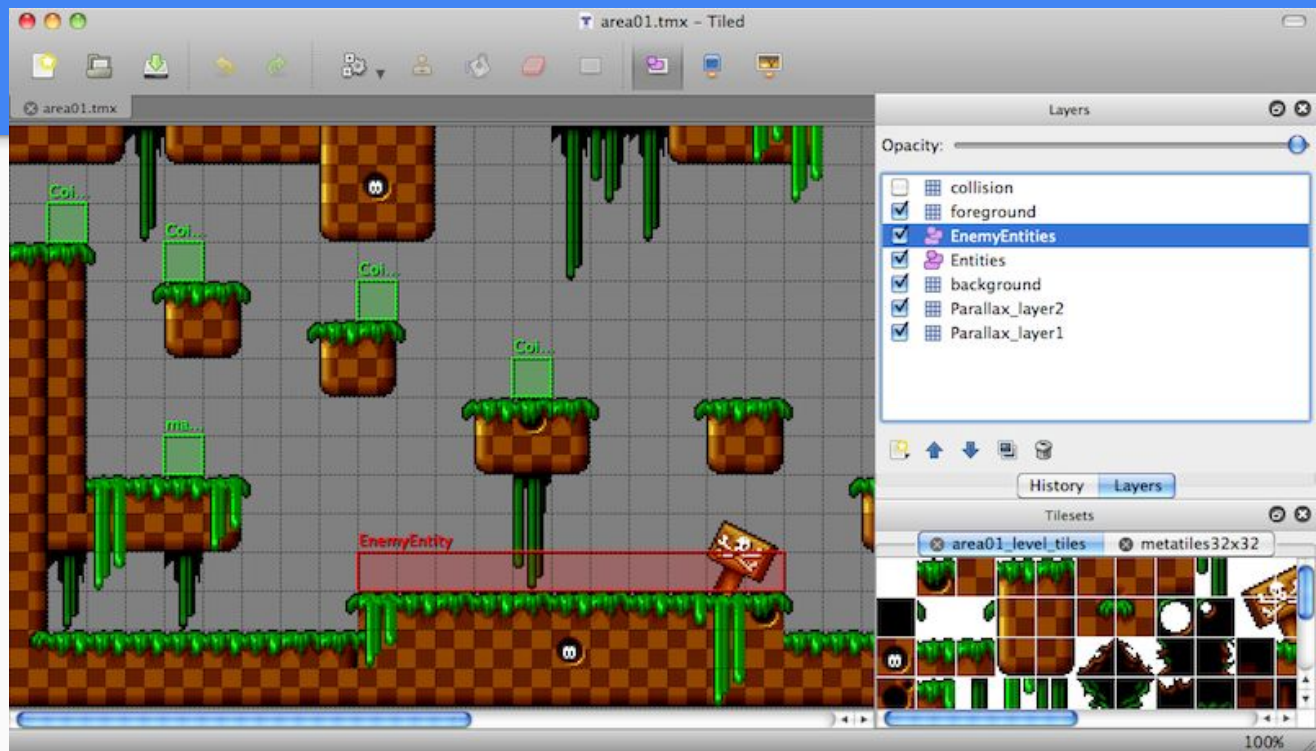
Level 4: Tropical

Level 5: Castle

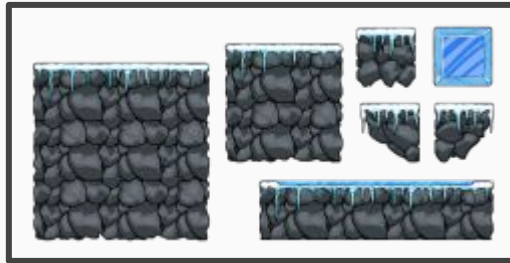
Level creation

Tiled map editor:

A free product for editing game 'maps' or levels using tiles on a rectangular grid



Sprites



Sprites (continued)

