
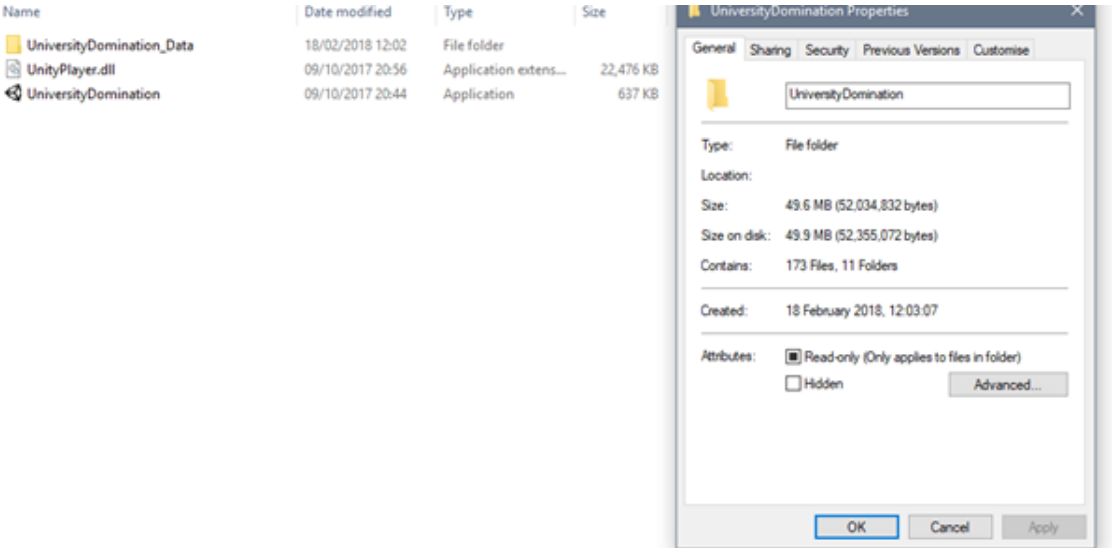


## Requirement Tests

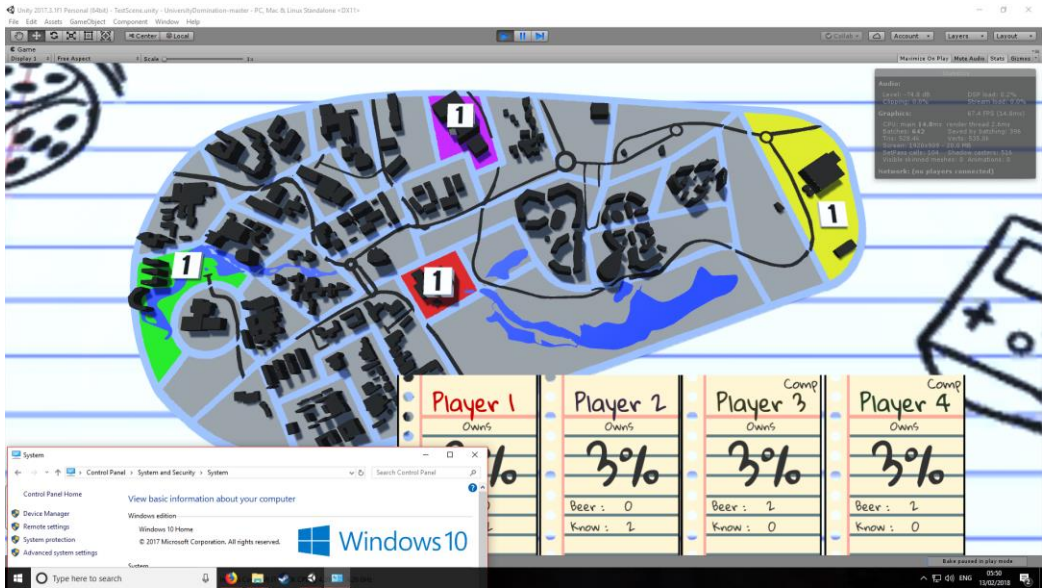
Requirement ID	Test Description/Success Criteria	Result	If fail: Additional Notes	Evidence ID	Related Unit Tests
C1	The game must be complete and delivered by 7th May 2018 (untestable)	N/A	The development of the game is on schedule.	N/A	
C2	The game shall be run 100 times. The game will pass the test if it crashes once or less.	Pass		N/A	
C3	The frame rate when running the game will be measured. To pass the test the game must run at 26 frames per second or greater at all times.	Pass		CE3	
C4	The game shall be played on a computer. To pass this test, the computer should not be damaged afterwards and the user should suffer no health issues resulting from the game.	Pass		N/A	
C5	The executable for the game must not exceed 1GB.	Pass		CE5	
C6	The game will be launched on a computer running windows 10. To pass the game should function as intended.	Pass		CE6	
N1	All code and documentation produced must be consistent, readable, and maintainable. (Untestable)	N/A		N/A	
N2	Design and implementation must be flexible to accommodate for any changes during development. (Untestable)	N/A		N/A	
N3	Test if there can be 4 human players in each game.	Pass		NE3	G1,G2, G3,G4, G5,G13, G14,NP1, NP2,NP3, NP4
N4	Test if the game map represents the University of York campus.	Pass		NE4	
N5	The game map should be divided into sectors. To pass there should be at least 4 sectors.	Pass		NE5	

N6	Some sectors must be designated as landmarks. Each landmark must be associated with an amount of resources.	Pass		NE6	G11,P1, P2,P3,P4
N7	Each of the four landmarks within the game must outline university landmarks. The position of each landmark was compared with a map of the campus to see if it was on top of a university building.	Pass		NE7	
N8	Run a new game and see if the sectors are clearly outlined. Then test if units are visible on the screen, and then see if it is clear which player owned which sector.	Pass		NE8	S3,S4, S10,S11
N9	To test if conflicts are resolved correctly using weighted random the extremes will be tested. A level 5 unit with 4 beer will attack a level 1 unit with no knowledge 20 times. A level 1 unit with 0 beer will attack a level 5 unit with 4 beer 20 times. If the attacking level 5 unit wins more than it loses and the attacking unit loses more than it wins the test will pass.	Pass		The level 5 attacking unit won 15/20 times and the level 1 attacking unit won 4/20 times.	P5,S6,S7, S8,U2, U3
F1	The game will be launched with two human players. Test is passed if the 2 players not controlled by humans are controlled by the computer.	Pass			G1,G2, G3,G4, G5,NP1, NP2,NP3, NP4
F2	The game will be launched with 4 human players and the players will cover all unclaimed sectors to check for the PVC. Test is passed if the minigame launches upon entering one of the unclaimed sectors.	Pass		FE2	G16,G17, G18,G19
F3	The game will be launched with 4 human players and the players will cover all unclaimed sectors to check for the PVC. Test is passed if the minigame launches upon capturing a sector containing the PVC	Pass		FE3	
F4	The PVC will be captured by a player. The test will be passed if capturing the PVC results in a bonus for the player.	Pass		FE4	

F5	A player will click on a sector that is occupied by their unit. They will then try to move their unit into an unoccupied sector. The player will then try to capture a sector occupied by another player that contains no units. If both these sectors are captured successfully the test will be passed.	Pass		FE5	G15,P1, P2,P3,P4, P5,S1,S5, S6,S7,S8, S9,U4, U5,U6, U7,U9
F6	The test will be passed if upon starting a new turn players receive a new unit at landmarks they don't already have a unit on.	Pass		FE6	P7,P8,P9,
F7	The game should be able to be paused, loaded, and saved.				

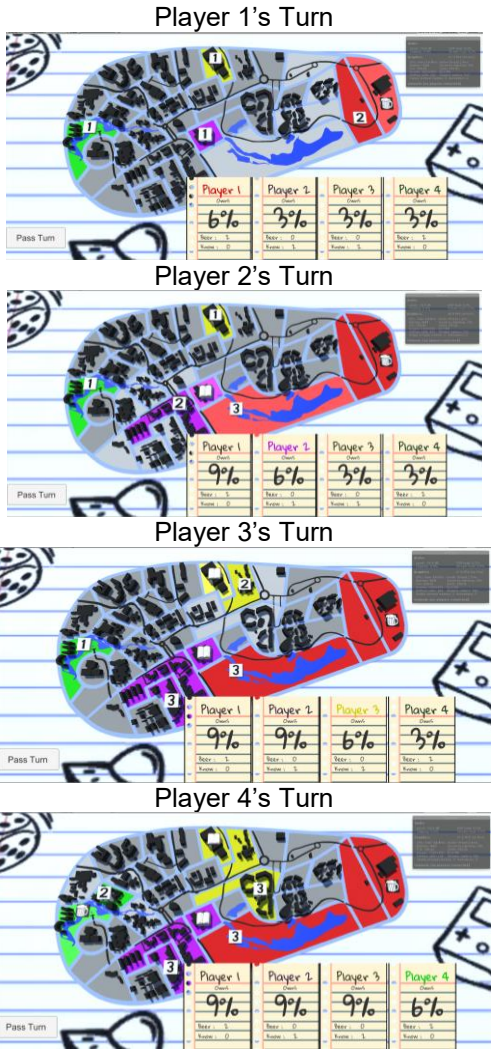
Evidence ID	Evidence Of Testing				
CE3					
CE5	 <p>Screenshot showing that the size of the executable and data files associated with it add up to 49.6 MB.</p>				

CE6



Game functions normally on a computer running windows 10.

NE3





NE4



The map is a representation of the University campus that spans from the biology department in the west to the York Sport Village in the east.

NE5



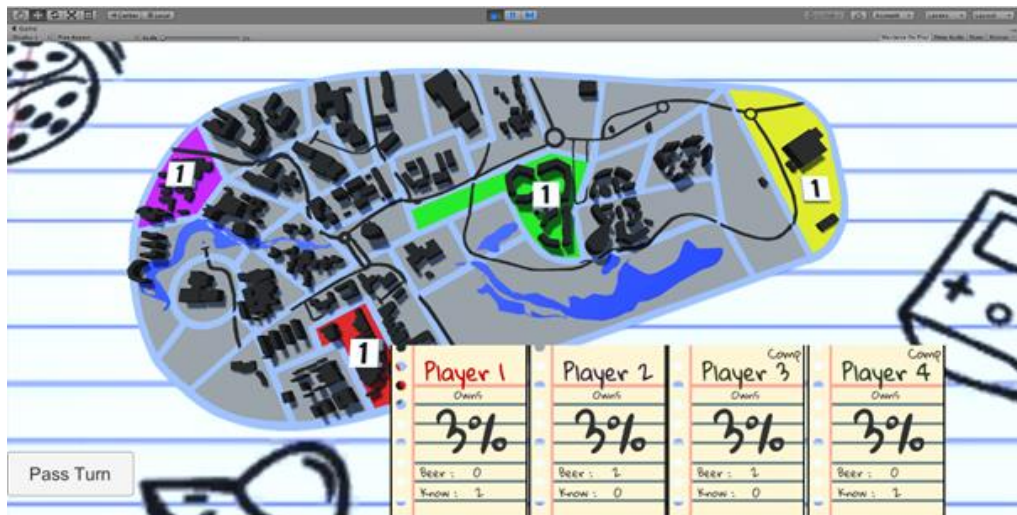
The game map is divide into 32 sectors

NE6



Here you can see each of the players start on one of the landmark and have each been given 1 unit of resources based on what the landmark is.

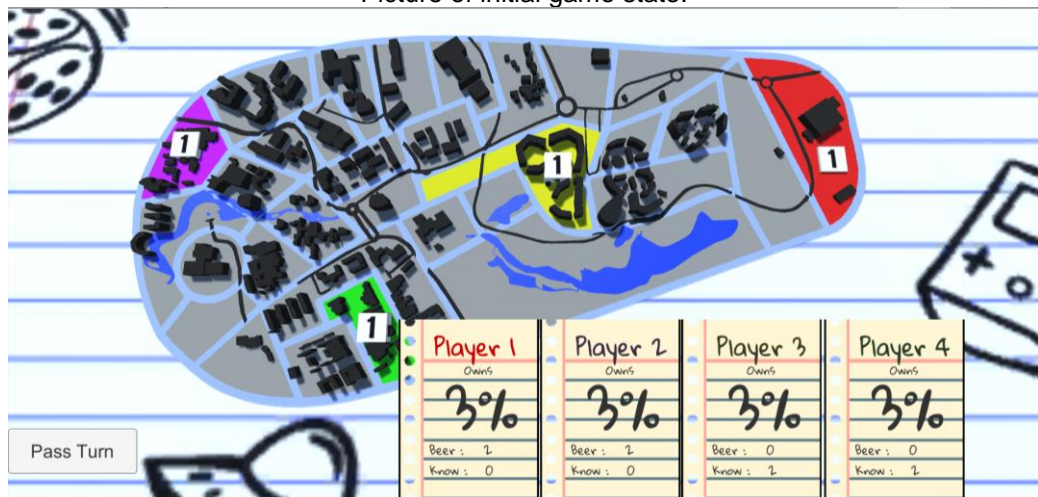
NE7



Screenshot of the main game screen showing the four landmark sectors. The purple sector is Biology, the red sector is Halifax college, the green sector is Goodricke, CS, LMB etc, and the yellow sector is the York sport village. All of these are university landmarks.

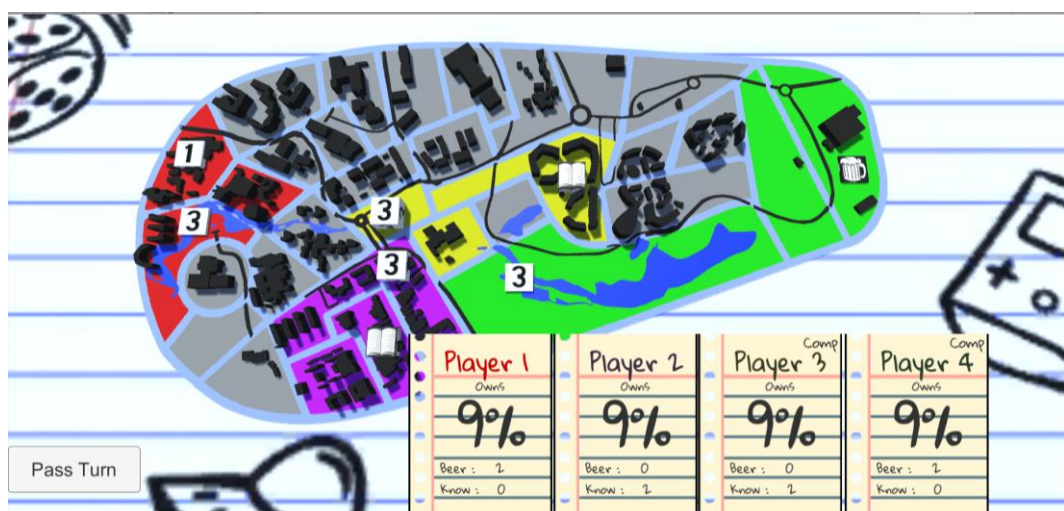
NE8

Picture of initial game state:



Sectors are outlined in light blue. Units are displayed as numbers in sectors. Occupied sectors are coloured based on owners colour.

FE1



This is a game after 2 players was selected to start. There are two human and two computer players. The computer players are labelled on the scorecards (Players 3 and 4).

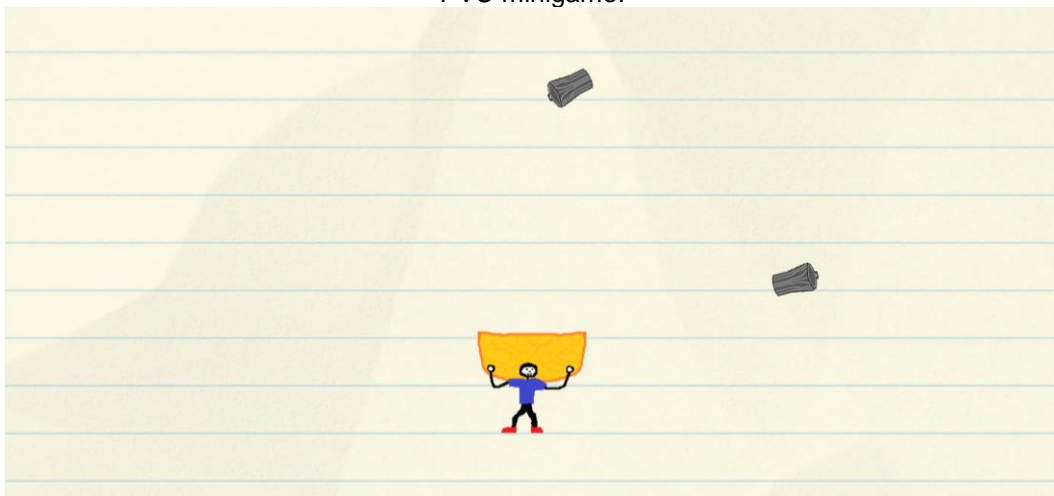
FE2

Game state before PVC minigame entered:





PVC minigame:



Game state after PVC minigame:



The PVC spawned in a random unoccupied sector.

FE3



Screenshots showing player2 (purple) moving to a sector containing the PVC and causing the minigame to start.

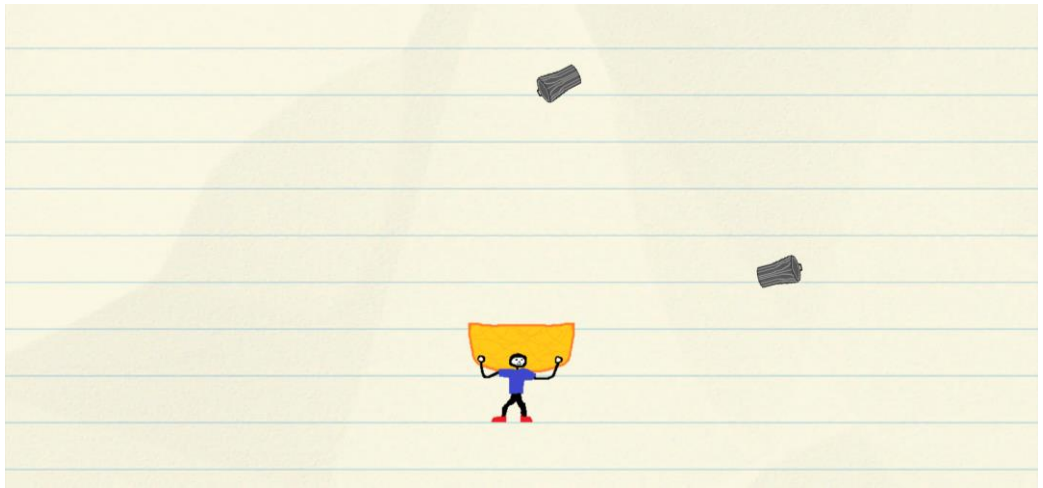
FE4

Game state before PVC minigame entered:



PVC minigame:





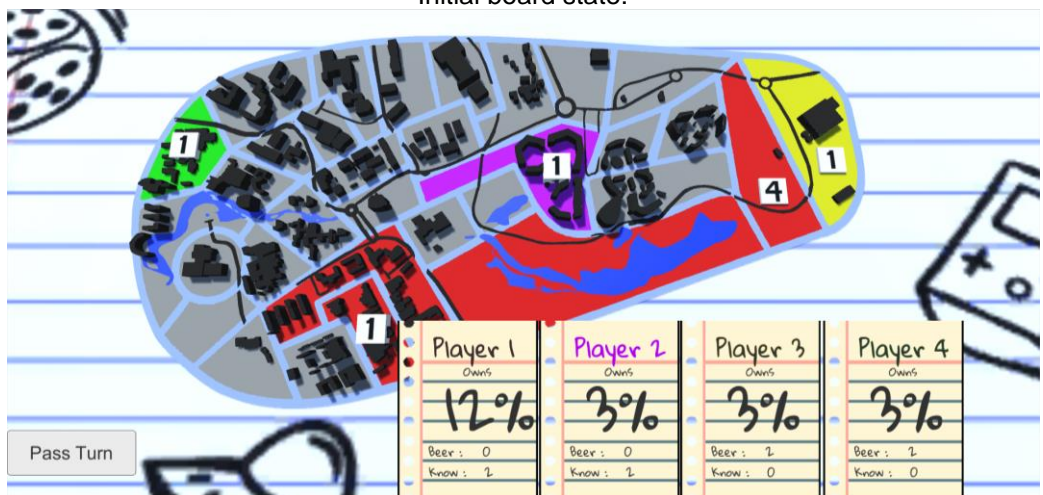
Game state after PVC minigame:



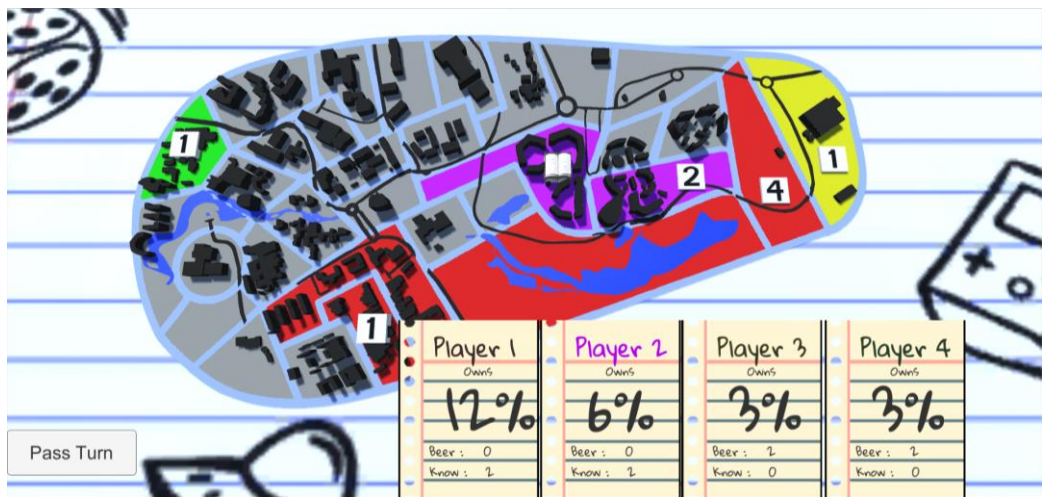
After the minigame the player who found the PVC (Player 2) has gained 1 beer and 3 knowledge as well as capturing the sector.

FE5

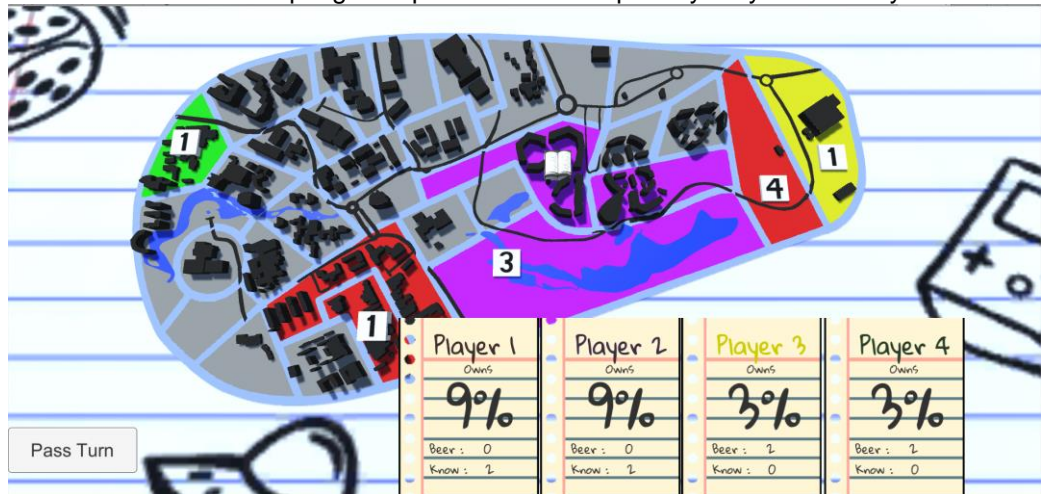
Initial board state:



State after attempting to capture unoccupied sector as Player 2:

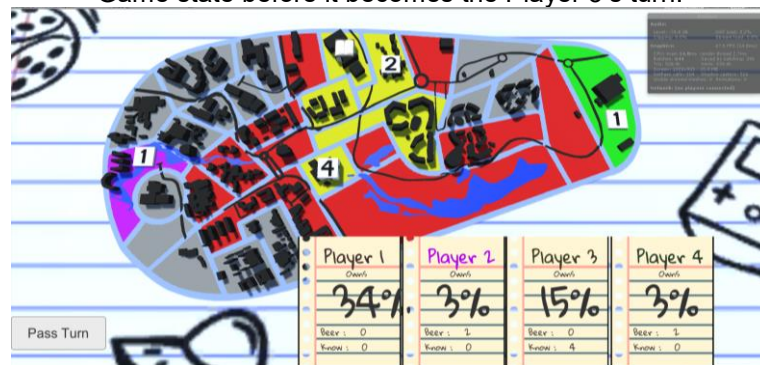


State after attempting to capture sector occupied by Player 1 as Player 2:



FE6

Game state before it becomes the Player 3's turn.



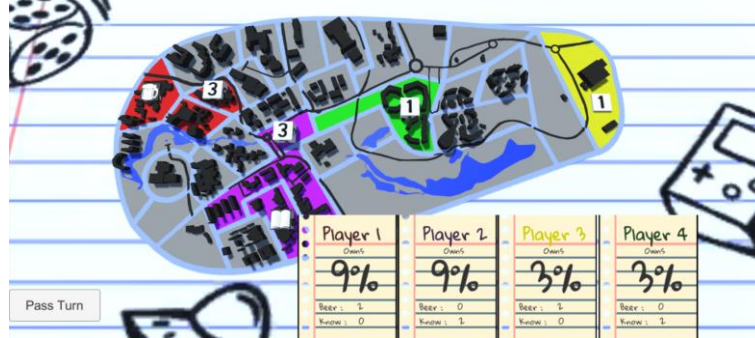
Game state when it becomes Player 3's turn. Player 3 gains a unit on the landmark without units on it but does not gain a unit on the landmark in the middle of the map as there is a level 4 unit on it.





FE7

Game view and state before pausing the game



Game view after pressing the escape button to pause the game



Game view and state after pressing the save button



Game view after closing the game and launching it again





Game view and state after pressing the load button

