

Tower Defense Game

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Use Case Scenarios

Scenario #1 – Adjust Volume

- Player opens up settings tab/menu
- Player clicks volume on/off
- Volume changes

Pragmatic flow –

- Volume doesn't change
 - o Verify system volume is on

Scenario #2 – Local/All time high-score

- Player opens up high-score menu
- Find player name

Pragmatic flow –

- Cannot connect to high-score
 - o Make sure device has internet access
- Doesn't submit players score
 - o Make sure device has internet access

Scenario #3 – Upgrade Tower

- Player selects tower
- Player presses upgrade
- Tower gets upgraded
- Currency decreases

Pragmatic flow –

- Player doesn't have enough currency
 - o Player must play more
- Towers maxed level
 - o Player must buy another tower

- Player cannot upgrade tower
 - o Player must buy tower first

Scenario #4 – Delete/Sell Tower

- Player selects tower
- Player presses sell/delete
- Player receives X amount of currency
- Tower is deleted from map

Pragmatic flow –

- Player can't delete/sell tower
 - o Player must buy tower first

Scenario #5 – Purchase Tower

- Player selects desired tower
- Player selects location of tower
- Tower gets placed
- Currency gets decreases

Pragmatic flow –

- Player doesn't have enough currency
 - o Player needs to play more
- Player selects wrong location
 - o Move tower
- Player selects wrong tower
 - o If tower has not yet been placed, select different tower
 - o If tower has been placed, sell tower
- Tower cannot be placed at desired location due to place being occupied
 - o Select different location

Scenario #6 – Move Tower

- Select tower
- Press move button
- Select desired location
- Tower gets placed at desired location

Pragmatic flow –

- Cannot select tower
 - o Buy tower first
- Select wrong location
 - o Move tower again
- Select wrong tower
 - o Select again
- Tower cannot be moved to desired location due to place being occupied
 - o Select different location

Scenario #7 – End Game

- Presses “end game” button or loses
- Go back to the main menu

Pragmatic flow –

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Scenario #8 – Start Round/Wave

- Player finishes last round
- Player gets 60 seconds to make adjustments
- Player can start round early via button otherwise round will start automatically
- Enemies begin to spawn

Pragmatic flow –

- Cannot start next round

- Player must finish current round

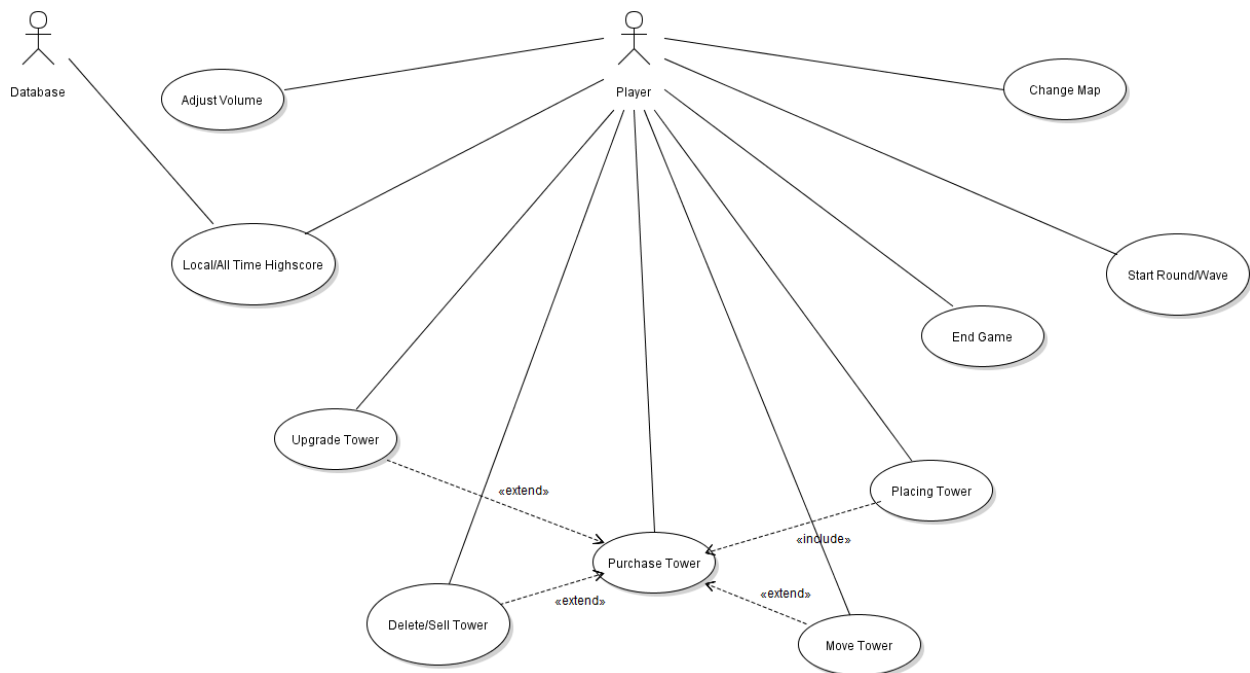
Scenario #9 – Change map

- Player starts game from main menu
- Player selects desired map
- Player clicks begin round button

Pragmatic Flow –

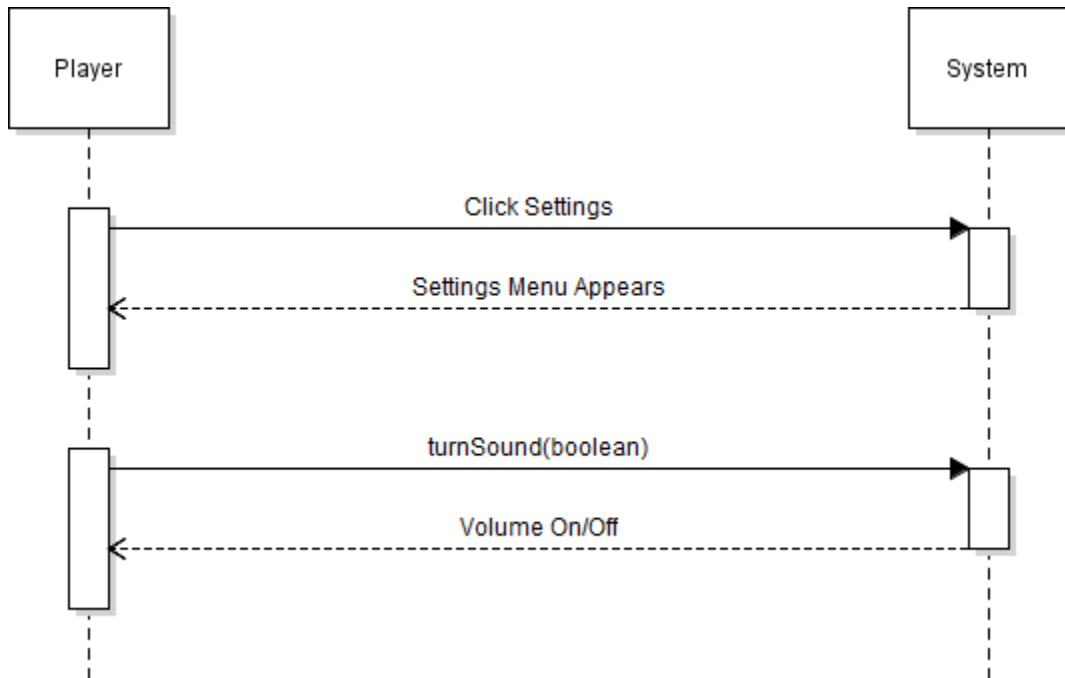
- Player chooses wrong map
 - Exit game and start over/select different map

Use Case Diagram

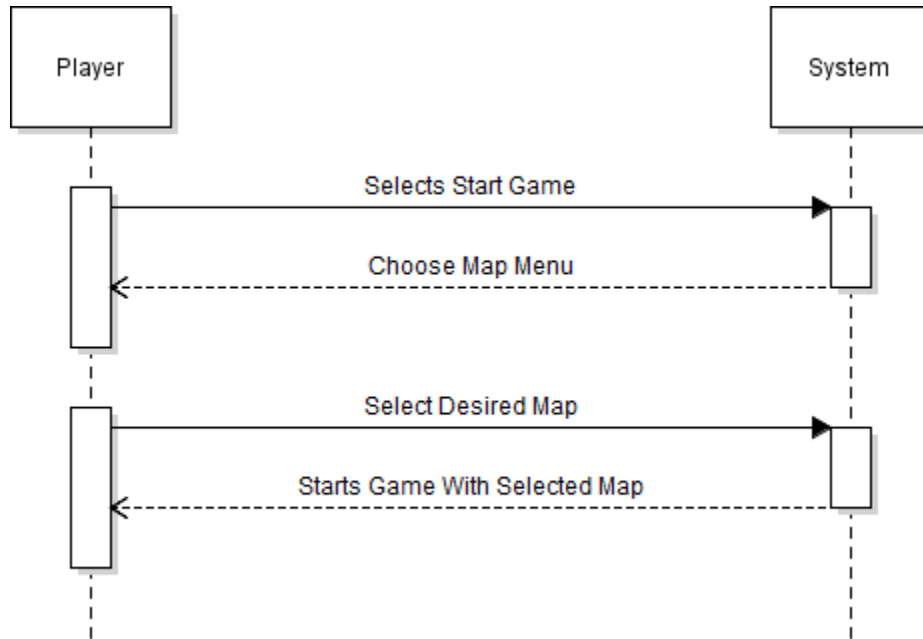


System Sequence Diagrams

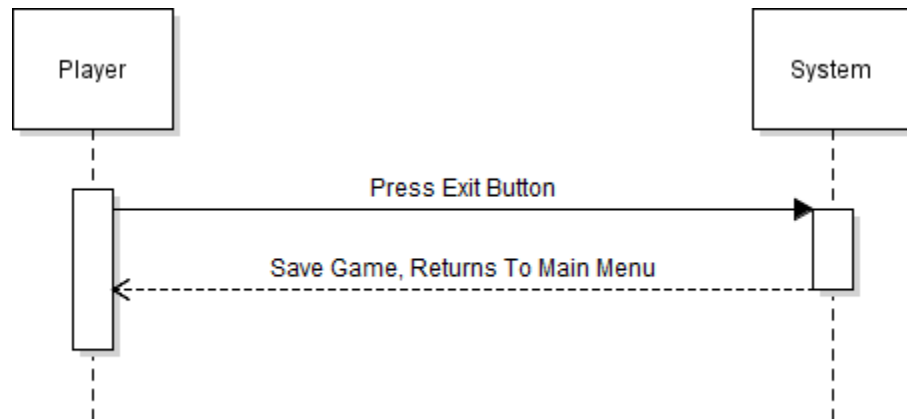
Adjust Volume Use Case



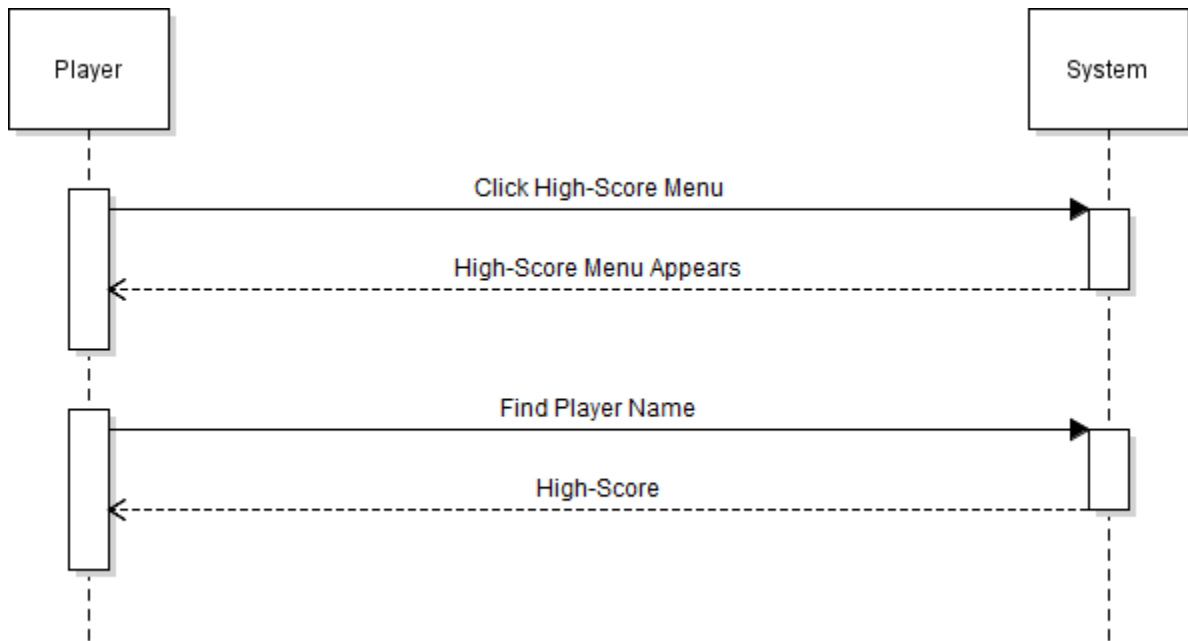
Start Game Use Case



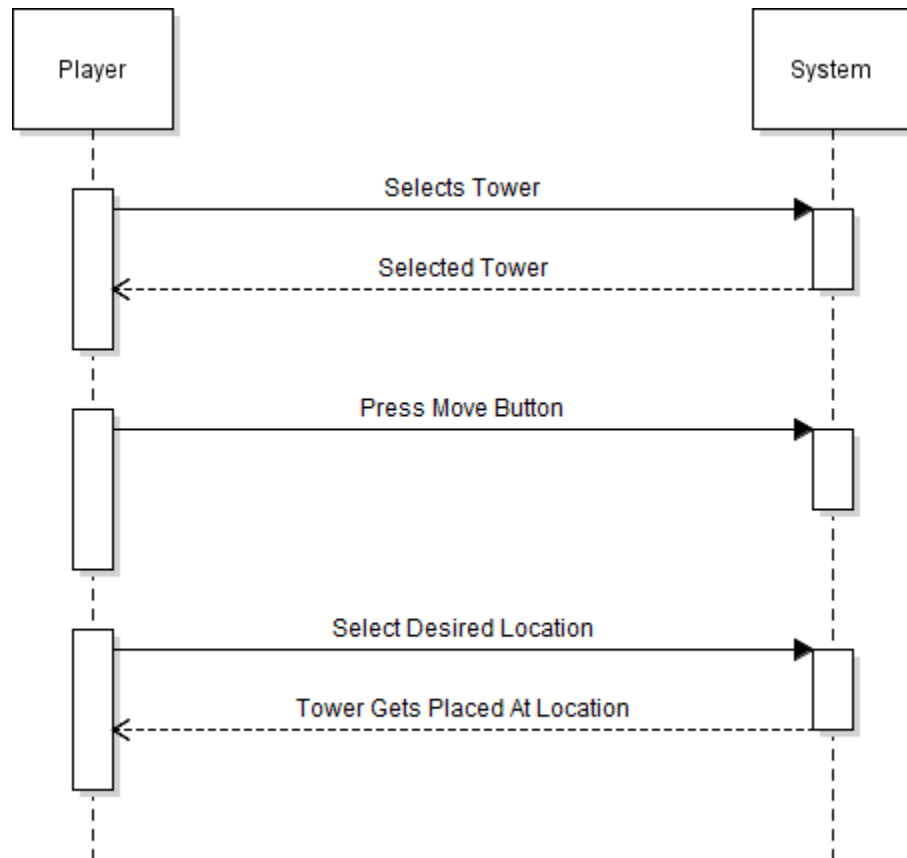
Exit Game Use Case



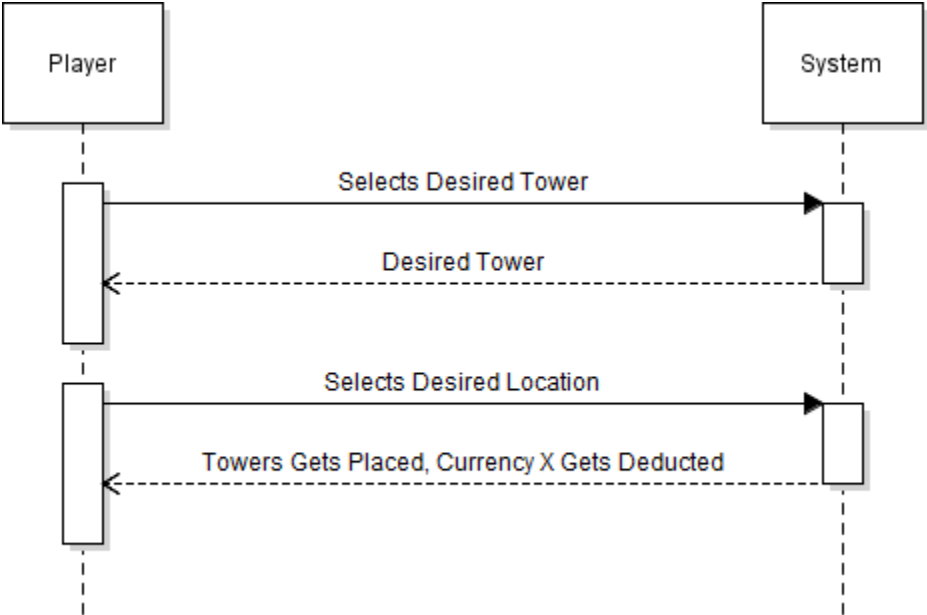
High Score Use Case



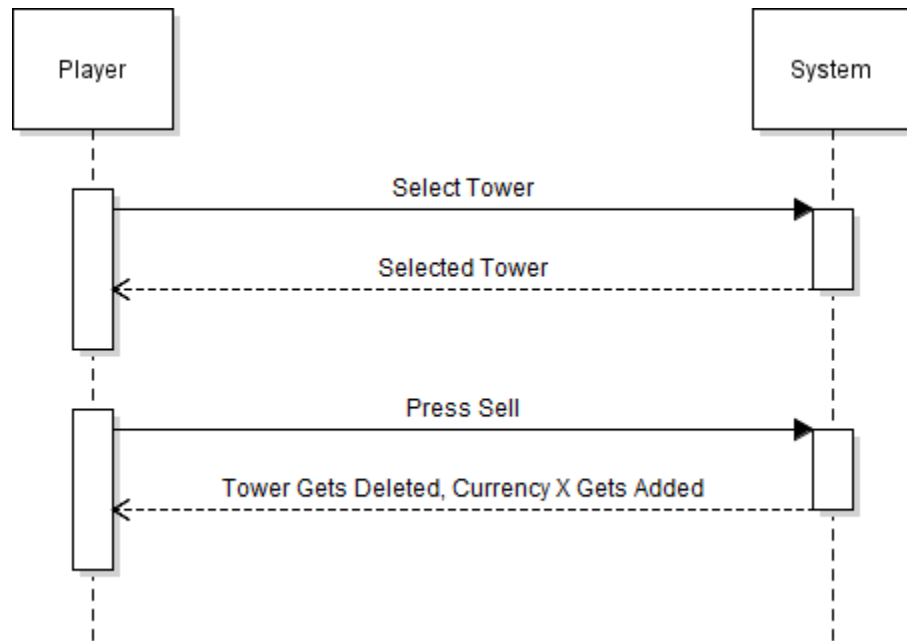
Select Tower Use Case



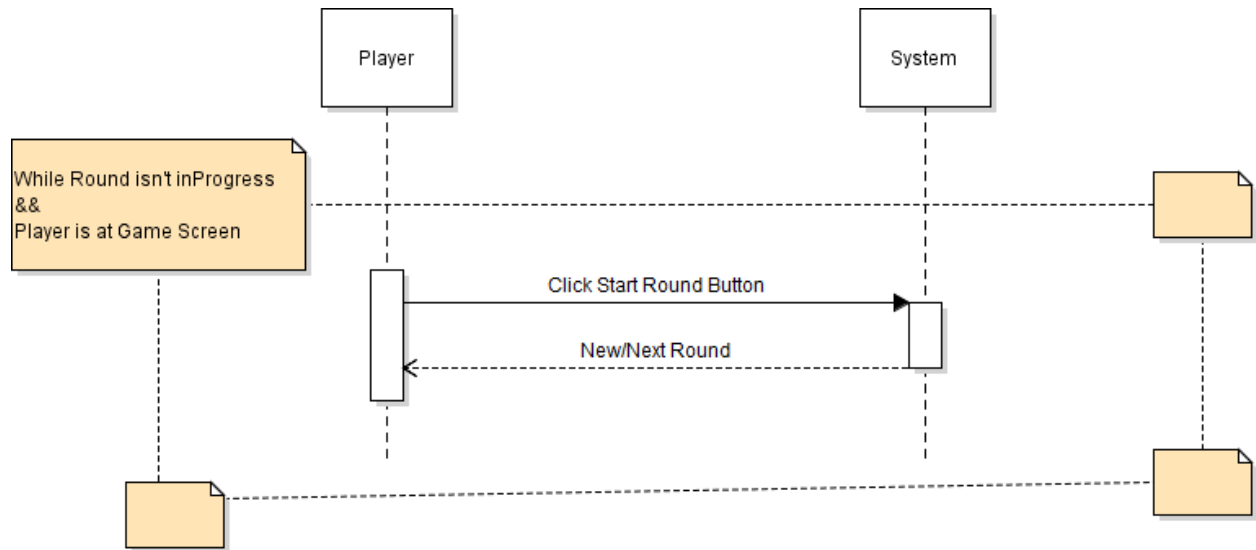
Move Tower Use Case



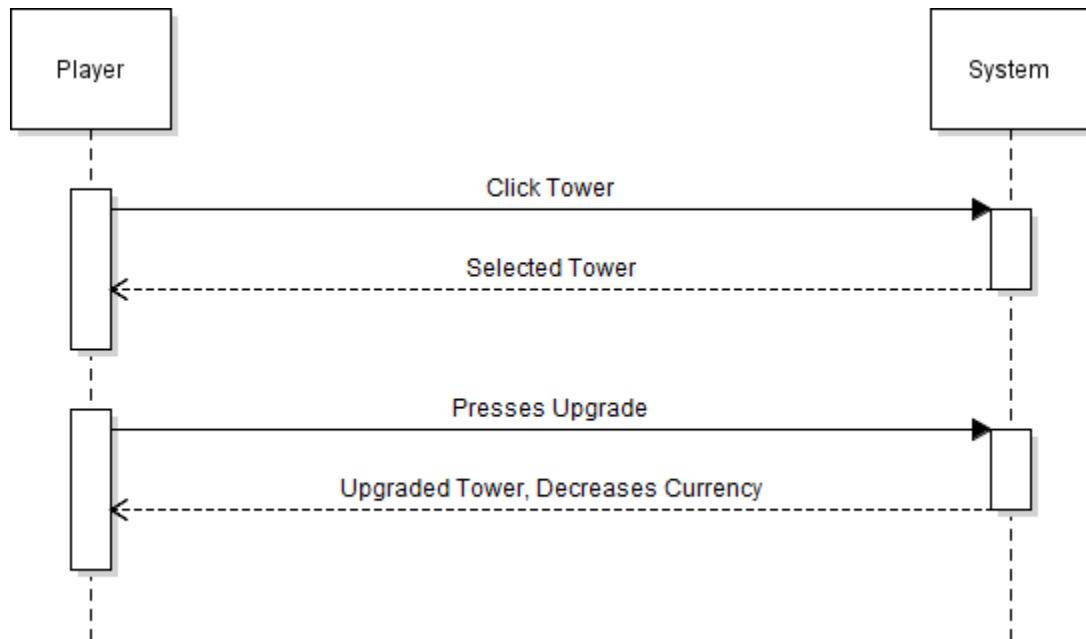
Sell Tower Use Case



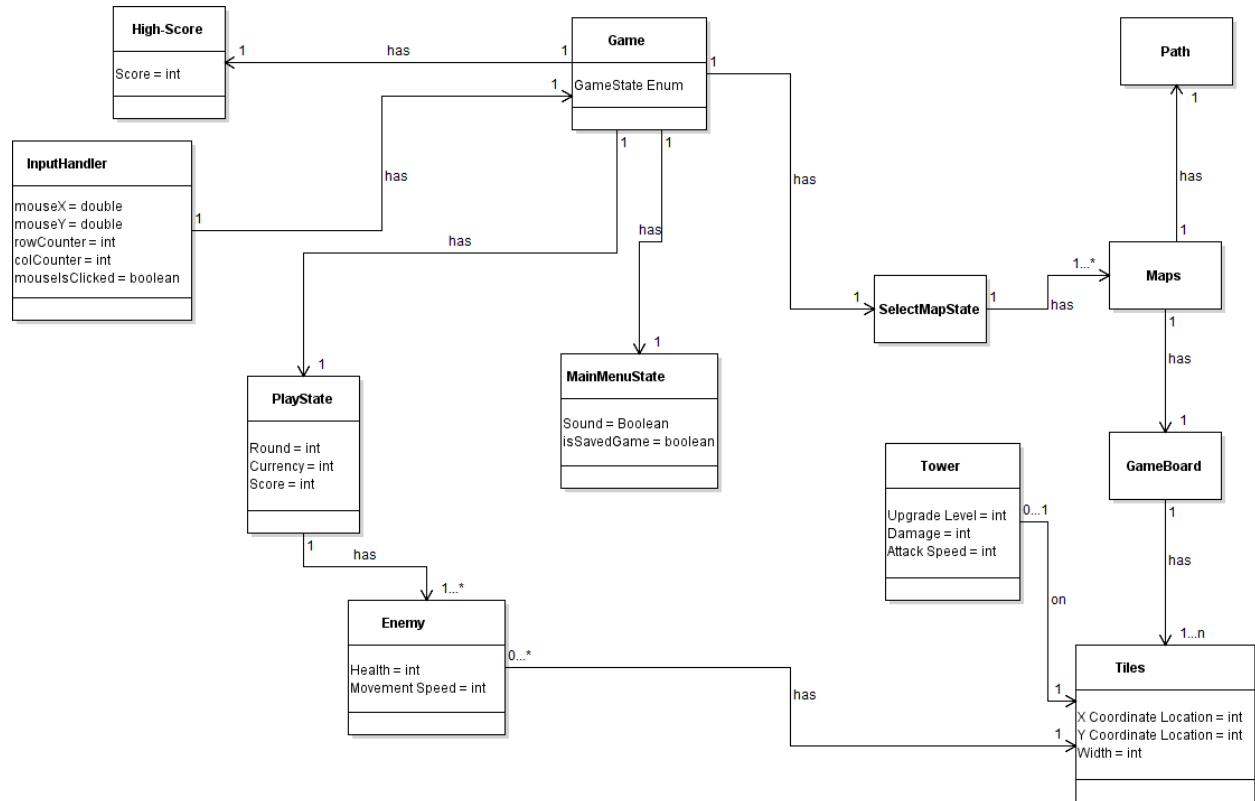
Start Round Use Case



Upgrade Tower Use Case



Domain Diagram



Class Diagram

