

## TDD - Tommy Sim

in list [Exercises](#)

### **Description** [Edit](#)

<https://github.com/TommyWaalkes/TommySim>

We're going to be using that repo today,

My task for you is two fold:

- 1) Add in sufficient UnitTests
- 2) Add new features using TDD

Adding Unit Tests

For class person test the following methods:

(This class has randomness in it heavily, how can we work around that?)

- 1) FindWater()
- 2) Drink()
- 3) ChopWood()
- 4) Scavenge()

For class HomeCity Test the following Methods:

- 1) IncrementWood()
- 2) BuildHouse()
- 3) IncreasePop() and KillPerson();
- 4) That winning works and losing works - these aren't in their own methods

Using TDD add in Enemies

Enemy Methods:

KillPerson()  
StealWater()  
StealFood()

PillagePlunder() - this method will randomly pick any of the previous

Using TDD add Win Conditions into City

- 1) You win the game if your city has 10 people
- 2) You win the game if your city has built a castle  
a Castle will cost 15 wood
- 3) You win the game if one of your Villagers finds the Holy Grail and then builds a temple for it, a Temple will cost 3 wood
- 4) You win the game if you construct an orbital space cannon and defeat the evil sky boss.  
The space cannon will cost 8 wood, each turn you may task a villager to fire the cannon, it will deal 1-2 damage per firing to the sky boss. Each turn you may also upgrade the cannon to deal 1 more damage for wood. The sky boss will have 15 health and upon his health dropping to 0 you win!

### **Activity**

[Show Detail](#)

