

CS 2263

Lab 04 – Domain Modeling

Assigned: February 7, 2019
Due: February 7, 2019

Settlers of Catan is a popular board game. Under the link above are the rules for the game.

Guess, what, you missed a meeting of your team and they have decided to ditch the old iteration 1 idea and make a computer app version of this game instead. They have put you in charge of making a domain model (in the form of a UML class diagram) to understand the objects in the game and their relationships better. So, using the English description on the webpage above, make a UML class diagram of the underlying game structure.

- We suggest you use the nouns/verbs technique to find classes (nouns) and methods (verbs).
- You can assume the board has already been fixed at the beginner setup, the computer program will not need to put the pieces of the board together.
- You don't need to try to understand and encode the rules in the diagram, only the different entities and how they relate.
- Do include some actions the players will need to perform as methods – they will be verbs in the description.
- There are quite a few entities described, you can stop at ten classes. You also will need to include five methods; don't include obvious getter/setter type methods.
- Make sure to include associations and use inheritance where it fits.
- You need to have at least one inheritance relationship in your answer as there are several ones in the game structure. Remember, "(subclass) is-a (superclass)" (plug in potential sub and super) is a sentence that should make sense in subclass relationships.
- See the design lecture notes on the UML class diagram features to use: classes, associations, multiplicity, inheritance, whole-part relationships, fields, and methods. You need not use any other UML widgets.