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COSC 3P91 Assignment 3

1. MVC:
   - The MVC has 3 classes Model, View and Control. The Model is the Player class, the View is the PlayerView and the Control class is the PlayerControl. All can be found in the Game package.
   - I decided to demonstrate the MVC only for the Player.
2. Factory Pattern
   - I choose to do the Factory pattern.
   - ArmyFactory is used to create army units depend on the input and return the unit. Can be found the Game package.
   - BuildingFactory is used to create buildings including the defense buildings depend on the input. Can be found in Game package.
   - WorkerFactory is used to create workers units depend in the input. Can be found in Game package.
   - I decided to implement Factory Patter on these classes because the player will dynamically create these object while playing the game.
3. Adapter Structural Design Pattern
   - BotToChallengeAdapter is used to convert a Bot object into a ChallengeEntitySet. Can be found in Utility package.
   - PlayerToChallengeAdapter is used to convert a Player object into a ChallengeEntitySet. Can be found in Utility package.

Other Notes:

   - The Bot class is modified to give enough information to convert the object into a challenge entity.
   - The Player class in Assignment2 is split into Player (model), PlayerView (view) and PlayerControl (control) to demonstrate the concept of MVC.
   - All of the classes in ChallengeDecision that is given by the professor haven't been change according the assignment.
   - I don't do the additional part of the assignment.