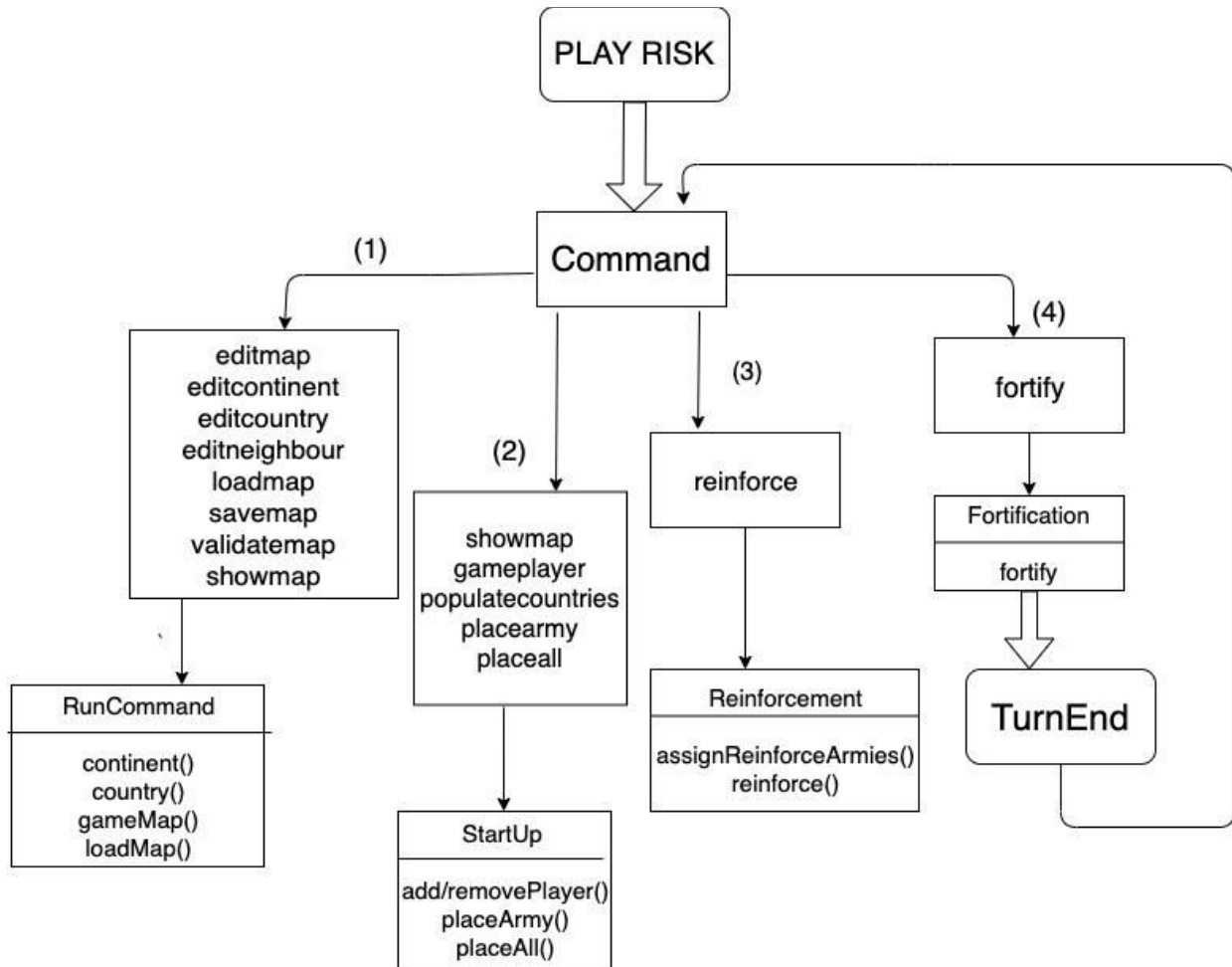


Architectural Design (Flow of Commands)



□ NULL Phase

PlayRisk.java - This is the main file of **Risk game** containing the Main() function to initialize the game. Two commands are valid when the game starts: editmap or loadmap. Further this file keeps reading the data from the user.

1. **editmap**: This command will open the existing map files or create a map from scratch if the named file does not exist. It will call **RunCommand.java** class which parse the user commands and call further classes or functions to implement the command.

□ **EDITMAP Phase**

After –editmap command the game moves to EDITMAP phase where the user can view map, add or remove nodes using following commands:

- editcontinent –add continentName continentValue –remove continentNname
- editcountry –add countryName continentName –remove countryName
- editneighnor –add countryName neighborCountryName -remove countryName neighborCountryName
- showmap

After all the modifications user need to save and load the edited Map using following commands:

- savemap fileName
- loadmap fileName

loadmap command changes the game phase to STARTUP.

2. **loadmap**: This command will also execute RunCommand.java file in which loadMap() function is called that loads a validated map for game play and change the game phase to STARTUP.

□ **STARTUP Phase**

In this phase players are added or removed according to user commands and then countries are allocated to every player. Following commands are implemented in this phase:

- gameplayer –add playerName -remove playerName
- populatecountries

□ **ARMYALLOCATION Phase**

Once the countries are populated the game moves to ARMYALLOCATION phase. In this phase, initial armies are distributed according to the number of players and placed on countries in a round-robin fashion. Following commands are implemented:

- placearmy countryName
- placeall

□ **REINFORCEMENT Phase**

After allocation of initial armies the game moves to REINFORCEMENT phase where reinforced armies are calculated according to number of countries owned by each player and placed on chosen country by the player. Following commands are used:

- reinforce countryName num

□ **FORTIFICATION Phase**

At last, the same player can shift the armies from one country to another or choose not to fortify any using following set of commands:

- fortify fromCountry toCountry num
- fortify none

□ **TURNEND Phase**

Once a player is done with fortification phase, the phase changes to TURNEND and next player performs reinforcement and fortification and the cycle continues for all the players.