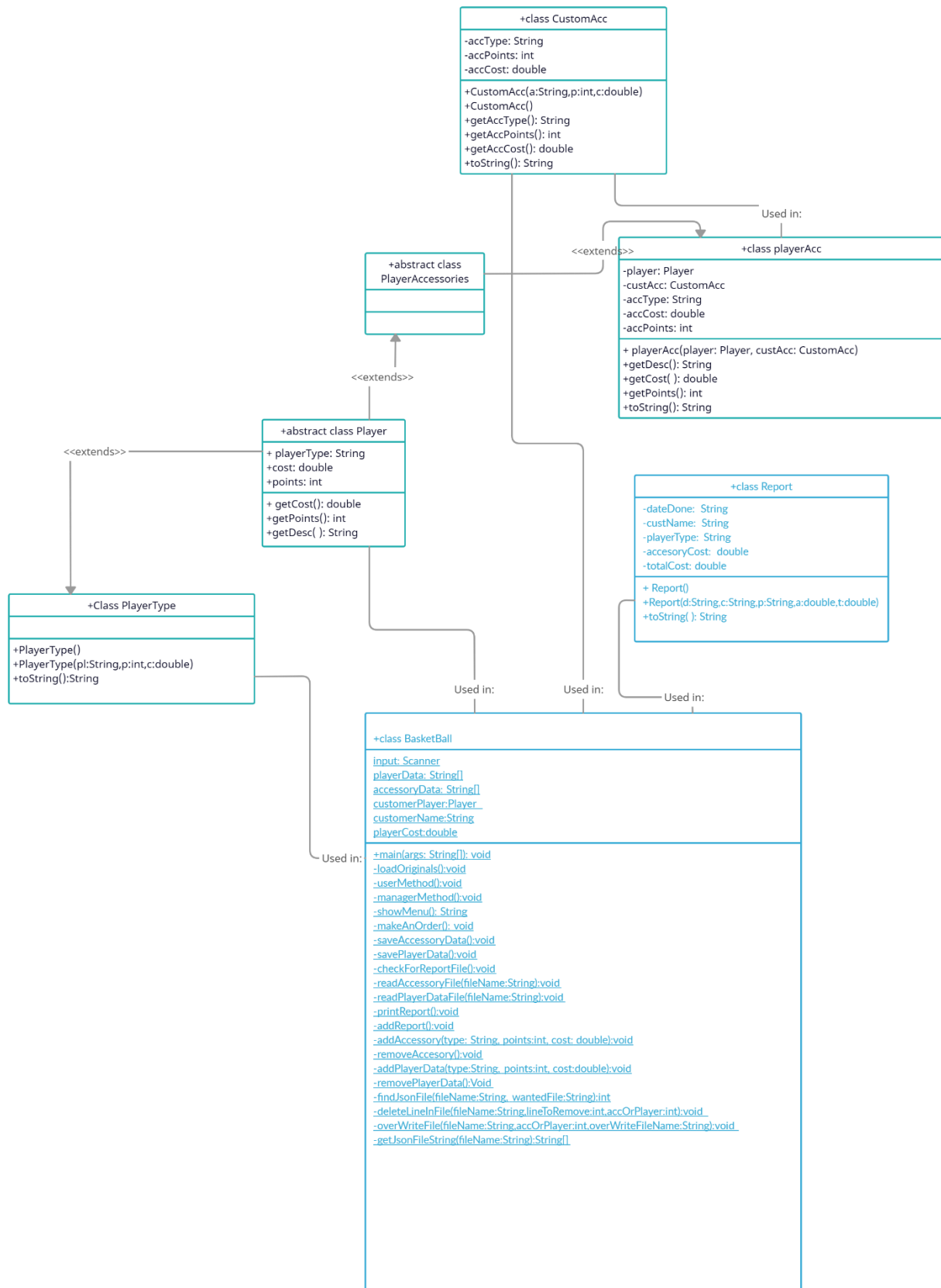


Class Diagram:



Pattern Utilized:

- Decorator Pattern utilized in the addition of accessories unto a new player.
- ^When a user orders a player.

Design- file storage:

- Utilizes Json.
- Makes use of external library gson.
- Reports are stored in separate .json file.
- Player data and accessory data are stored in separate .json files.
- Saved data for player and accessory data are stored in separate files.
- ^ Only one "save slot"
- Report, Accessories, and Player, blank json files are made if none are found in the directory.

Reports:

- Report file not overwritten; is appended onto.
- Feature: date, customer name, player type (including accessories if any), accessory(s) cost, total cost.
- Invoked with addReport() private function.
- ^ Called after user orders a player.

Objects Map:

- Json file is read through arraylist(since it is resizable) then put into a string array
- Mapped through integer 0-n, n = size of data string array(acquired through json file)

User Interface:

- Users and Managers interface separate
- Users give name(customerName) once through program
- Users have 2 options, (1) view menu, (1) make an order
- Managers have 9 options, (1) view reports, (2) read in accessory data file(.json), (3) read in player data file(.json), (4) add accessory data, (5) remove accessory data, (6) add player data, (7) remove player data, (8) save player data, (9) remove player data
- Ability to go back to previous menu
- Can only exit program from the first options, 1.) Manager 2.) User 3.) Exit

Language chosen: Java

- Since all member of the group had more experience with Java than C#, also allowed us to use the external java library gson.

Design Constraints/Limitations:

- Only one of each (player data and accessory data) save possible
- Possible to completely overwrite data(if not saved)
- Can read in accessory data to player data (resulting in null entries) and vice versa

Future Improvements:

- Multiple save files
- Better UI
- Better file management
- Better save system