// bayside basics
// Jason Kim, Derek Song
// UML Diagram
// APCS1 - pd.1

* (ship name)
  ↑
represents the
5 different ships
Carrier, Battleship,
Cruiser, Submarine,
Destroyer.

```
┌─────────────────────────────────────┐
│  Player    (Abstract)                │
├─────────────────────────────────────┤
│ # String[][] _grid                   │
│ # String[][] _opp Grid               │
│ # int  _ships Alive                  │
│ # int  _(ship name) HP               │
│ # boolean  _playing                  │
│ # String  _lastShipHit               │
├─────────────────────────────────────┤
│ + get(ship name)HP ()                │
│ + get Ships Alive ()                 │
│ + set (ship name)HP ()               │
│ + set Ships Alive ()                 │
│ + setPlaying ()                      │
├─────────────────────────────────────┤
│ + void setGrid()                     │
│ + boolean check()                    │
│ + abstract void attackOpponent       │
│                    (Player opp)      │
│ + abstract void place(ship name)     │
│                              ()       │
└─────────────────────────────────────┘
```

```
┌──────────────────────────────┐
│  Human                        │
├──────────────────────────────┤
│ + String  toString()          │
│ + int letterToInt(String let) │
│ + void place(ship name) ()    │
│ + void attackOpponent         │
│              (Player opp)      │
└──────────────────────────────┘
```

```
┌──────────────────────────────┐
│  Beginner AI                  │
├──────────────────────────────┤
│ + void attackOpponent         │
│              (Player opp)      │
│ + void place(ship name)       │
│                         ()     │
└──────────────────────────────┘
```

```
┌──────────────────────────────────────┐
│  Advanced AI                          │
├──────────────────────────────────────┤
│ # int  old Row, oldCol                │
│ # int  row, col                       │
│ # int  row Attempts                   │
│ # int  turn Count                     │
│ # ArrayList (ship name)Coor Row       │
│ # ArrayList (ship name)Coor Col       │
│ # boolean  currently Finishing        │
├──────────────────────────────────────┤
│ + void attackOpponent (Player opp)    │
│ + void place(ship name) ()            │
│ + int  evenOrOdd (int r)              │
│ + void centerCoor()                   │
│ + boolean fiveXH ()                   │
│ + void rowChange()                    │
│ + int coorForHitR()                   │
│ + int coorForHitC()                   │
│ + void coorForHit ()                  │
│ + int check Direction ()              │
└──────────────────────────────────────┘
```