Minmum Viable Product Framework

Idea: *Once we build this or a similar adaptable **framework**, we can add features.*

Player Objective: Make as much money as possible. When you catch a fish, you sell it for money. When you have enough money, you can buy better supplies, allowing you to catch fish quicker and earn more money faster.

Package Name: catchgame

Catch
+AuthenticateUser()
+ start()
+ main(String[] args)

Player
- String password
+ getUserName(): String
+ getCashOnHand(): double
+ getIceChest(): ArrayList\<SeaCreature\>

DAO
+ getPlayer(String userName, String password): Player

GameControl
- DAO
- GamePane
- Player
- catchFishFromWild(ArrayList caughtFish, ArrayList wildPopulation)
- sellFish(ArrayList caughtFish): double
- CatchFishHandler **implements** EventHandler\<ActionEvent\>
- SellFishHandler **implements** EventHandler\<ActionEvent\>
- SaveGameHandler **implements** EventHandler\<ActionEvent\>

```
<<Enum>>
FishSpecies
-----------------
COD
SALMON
```

```
Fish
-----------------
+ getWeight(): double
+ getSpecies(): FishSpecies
```

```
<<Enum>>
BoatTypes
-----------------
ROW_BOAT
FISHING_SKIFF
```

```
Boat
-----------------
+ getNumberOfNets(): int
+ getType(): BoatTypes
```

```
Ocean
-----------------
+ getCodPopulation(): ArrayList<Fish>
+ getSalmonPopulation(): ArrayList<Salmon>
```

```
Market<T>
-----------------
+ setName()
+ getName()
+ getCurrentPrice(T): double
+ sellItems(ArrayList<T>) double
```

Market<SeaCreatures>

Market<Boats>
+ BuyBoat(double): Boat

Ocean
+ getCodPopulation(): ArrayList<Fish> + getSalmonPopulation(): ArrayList<Salmon>

Package Name: userinterface

GamePane
+ setCashOnHandText - Button btnCatchFish - Button btnSellFish

NewGamePane
+ TextField + PasswordField