

Object Oriented Programing Term Project Proposal

Game Name : Fish Eaters
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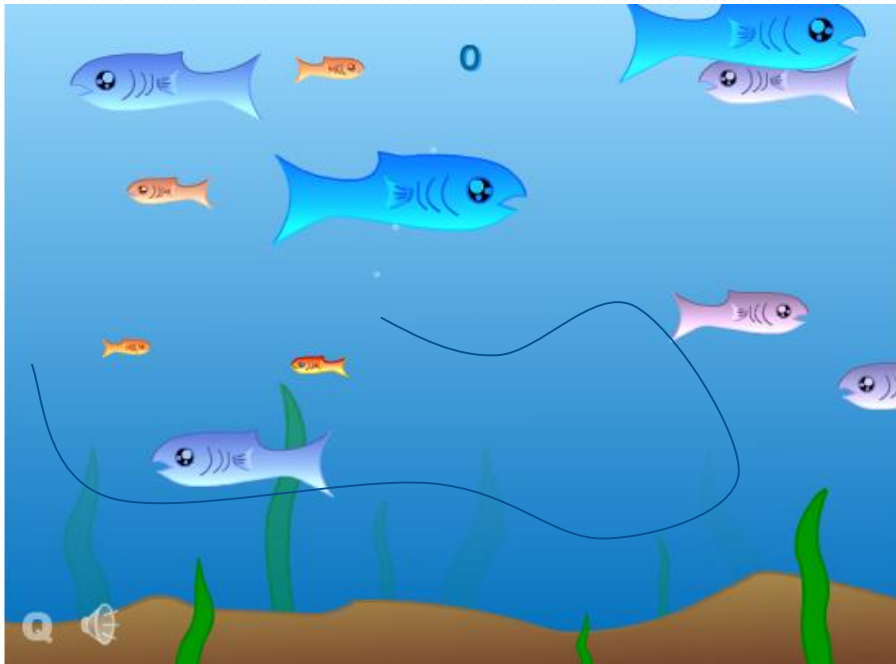
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About Game

Introduction of basic concept of the game and some rules.

Basic Concept of the Game

Game Name: **Fish eaters**



- Player s should move fish with keyboard to eat smaller fish.
- The fish grows up by eating other fishes. If the fish grow up, it can eat bigger fish.
- Two players may compete to eat more fishes, and to eat competitor's fish.
- Computer fishes appears randomly at edge of the screen
- If, eat competitor's fish, win.
- 2 player game.

Basic rule of the game

Other player's fish or
bigger computer's fish

Smaller fish



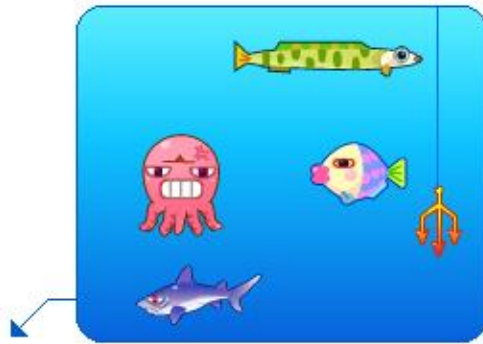
Player's fish



Player's fish can eat computer's fish. (These computer's appear at the edge of the screen randomly) Player's fish grow by eat fishes.

Player's fish can be eaten by other player's fish or bigger computer fish. If be eaten, player's fish dead.

Other rules of the game.



- The fish has three or more chance to revive.
- To use special ability, the fish have to gather some energy which recover time by time.
- The player whose fish other player's fish or survive more time than other is winner.
- Computer's fishes appear randomly at the edge of the game screen. (many many)

Some danger things to fishes



- The hook : if the fish eat it, fish will die.
- The shark is strongest fish in the sea world, so player's fish can't eat shark.
- Some other elements can be add to the game in developing time.

Various kind of fishes



Players can choose fish.

- Players can choose the fish from 6 or more kind of fishes.
- Each fish has unique ability and some special features. (ex : fast speed, hide in shield, decoy fishes and so on)
- Fish should gather energy to use ability.

Some Characteristic of fishes



Fish Name : Turtle

- Speed : slow
- Acceleration : Bad
- Special Ability : Hide in urtleback (Safe)



Fish Name : Swell Fish

- Speed : Normal
- Acceleration : Normal
- Special Ability : Light

Class Design

Simple class diagram.

Class design of the game

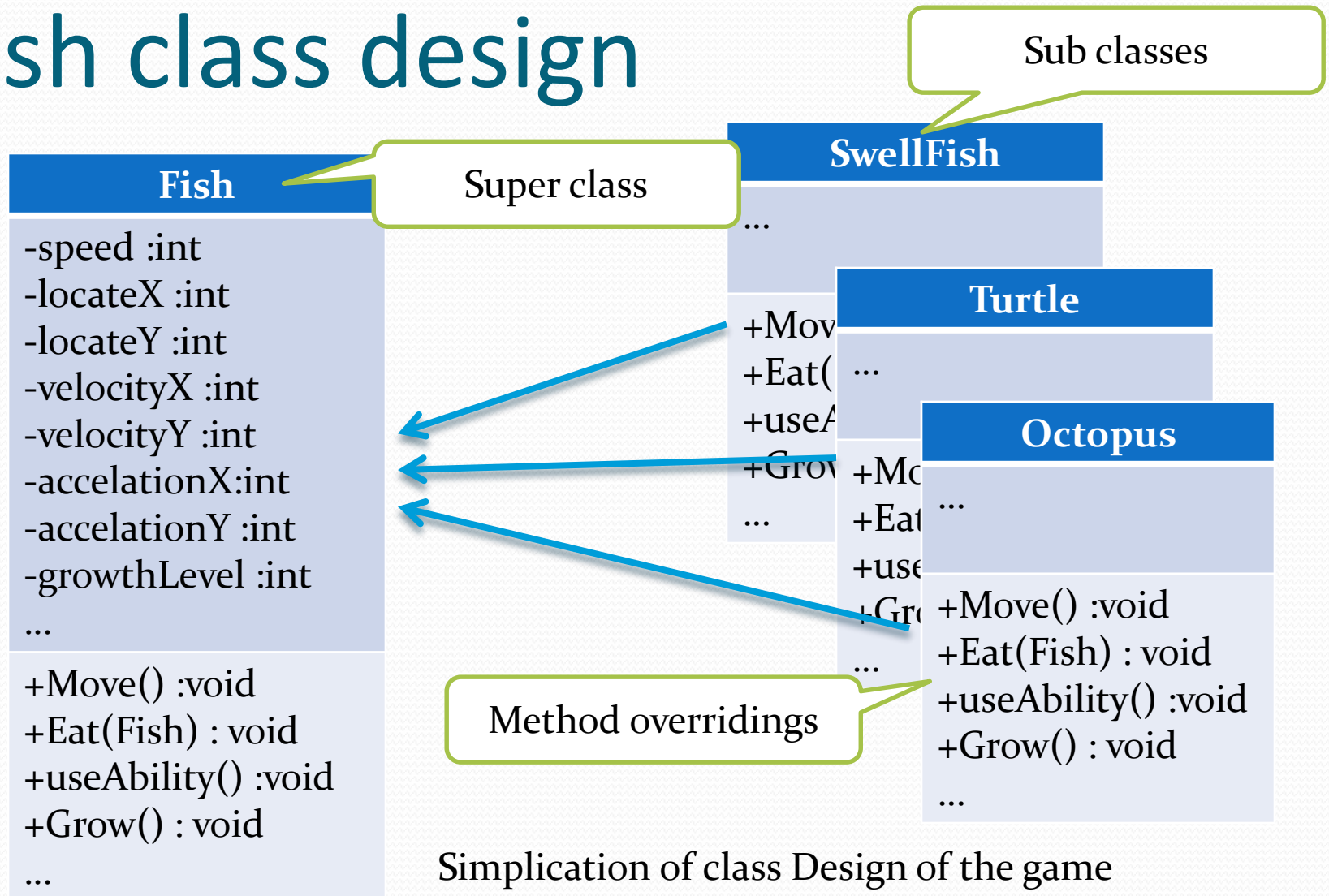
- Object oriented programming style uses class and make instance of class to solve problems.
- Designing class is one of the most importance things in developing program by object oriented programming style.
- Class design : inheritance and by using polymorphism.
- Structure of classes in the program can be express with UML.

Fish classes

- There are various kind of fishes that player can select before game start.
- Each kind of fishes have general characteristic(move, eat and so on) and specialty(special ability).
- So, we have to make class of each kind of fish.
- Each kind of fish class inherits super class of fish classes.



Fish class design



Simplification of class Design of the game
Subclasses will be more (about 6 or more).

Advantage of inheritance?

- We can use polymorphism by method overriding.
- Polymorphism provide us critical advantage of code recycling and flexibility of the code.





End of Proposal
Thank you!

