

Firstly , I would like to analyze the requirements of the game:

1.target users : 7-8 years old children

- could read and write simple words
- could be attracted by colorful and cartoon style game objects and characters.
 - overall style: cartoon, colorful, adorable, simple
 - UI: better to use image for explanation game rules than using words

2. game platforms : From my understanding, most 7-8 kids would like to use tablets and smartphones. Maybe computer and keyboards are too early for kids in this age

- user input method: mouse click/ finger tap
(but in today's test, since I used a desktop and keyboard to develop the simple game in a very short time, using keyboard to input is ok. **But that could be improved later.**)

3. Functionalities:

- a shark as the main character that could be controlled by the players.
 - init HP =200;
 - controlled by keyboard (a/s/d/w)
 - collide with target fish/ poison fish, gain/lose hp, fish/ poison fish destroy
- at least 2 types of fish:
 - target fish: shark eat the target fish gain hp (+50)
 - poison fish: shark eat the target fish lose hp (-20)
- Fish AI:
 - generating fish randomly from left to right
 - destroy when move outside the screen border
- an hp bar shows the hp change in a visible way that better than numbers to 7-8 kids
- a series of UI images that shows the game rules
- a undersea background