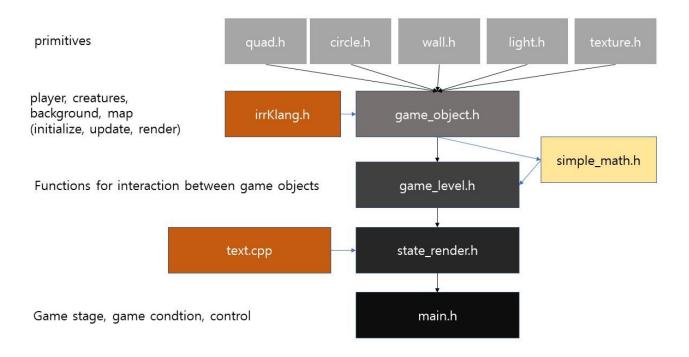
- 1. Objective Making Game
  - A. 2D Game
  - B. I planned to make a game with small story and conciseness to play
- 2. Data Structure & Algorithm
  - A. The structure for inheritance of header files is like below



- B. In primitive structure, they have vertex, index, also buffer for its primitive geometry.
- C. In game object level, object structures are made with combination of vertices, light, texture that are come from primitive structure.
  - i. game objects are mainly divided in two parts, player and creature (and remained objects are background and map)
  - ii. Its attributes can be initialized update and rendered, Additionally structure player has the control function
- D. In game level, it processes the results of inter-objects. For example, it has the function that can check the collision between creature creature, or creature player. Some attributes of objects can be processed here
- E. state render is not special, it is just intermediate level to process the rendering. It consists of multiple

render functions of game object. for example, background, text, game menu

F. main source file controls all remained parts that are control, events, game state and game stage and finally really draw and update the whole objects in time or frame.

## 3. GAME PLAY

- A. player character can be controlled with the keyboard input, UP, DOWN, RIGHT, LEFT and Z
- B. The goal of game is passing all stage and win in the game with high score.
- C. In stage1 you need to pop bubbles in limited time. It will be screened in the window.

## 4. Discussion

A. I didn't solve the problem of keyboard input. I want to implement that it always works same whenever user presses key long or short. But it doesn't work like my original purpose. It is better to push key rapidly many times in one second.