

**A1 - Proposal**

**COMP 4451 – Game Programming**

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| Group ID  assigned by the course staff | 03 |
| Group Alias  connect.ust.hk email of any one of the members |  |
| Game Name  tentative name which can be changed later | Soul knight |
| Group members Student name (connect.ust.hk email address) E.g.: *Pedro Sander (psander)* | CHEN, Siyu (schendf) |
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For each of the questions below, the suggested number of sentences is just a rough guideline. You may elaborate further if you think it is important to get the idea across.

## 1. Summary of the idea

What the game is about and its overall objective. (5-8 sentences)

This is a 2D retro-style single-player roguelike game. The main purpose is to protect the crystal from enemies. Players are free to choose the roles, skills, weapons. There will be endless levels of difficulties. As time goes by, the enemies will be stronger, bosses will appear. Player will get some sapphire money when kill an enemy. Money can be used to build tower and wall through engineer, buy more powerful weapons through trader, or strength the role through instructor, get buff from wizards.

## 2. Inspiration

Sources of inspiration for this game idea and the creative aspects that you introduce. (4-6 sentences)

We are inspired from the game “Soul knight” made by chillyroom. Its game design is different from what we design. But we find it has such a powerful and rich weapon, buff and role skill system. We are rather interested in design a new gaming mode for this game.

## 3. Category

See introduction slides for common options. If it doesn’t fit any, specify “Other” and describe why.

Roguelike-RPG, tower defense, shooting.

## 4. Game structure

**Linear** or **Sandbox** (or **hybrid**): \_\_\_\_\_\_\_Linear\_\_\_\_\_\_\_\_\_  
Describe why. (1-2 sentences)

Endless level, one goal, but many choices.

## 5. Players

**Single-player** or **multi-player**: \_\_Single-player\_ **Competitive** or **cooperative**: \_\_\_cooperative\_\_\_\_\_\_  
Describe how and discuss plans for AI computer players if applicable. (3 or more sentences)

## 6. Visual characteristics

If it doesn’t fit the options below, specify “Other” and describe why.  
 **Realism** or **Abstraction**:  **\_\_\_\_\_\_Abstraction (Retro Style) \_\_\_\_\_\_\_\_\_**

**2D** or **3D**: **\_\_\_\_\_\_\_2D\_\_\_\_\_\_\_\_\_**

**1st** or **3rd** person view: **\_\_\_\_\_\_\_3rd\_\_\_\_\_\_\_\_\_**

## 7. Mechanics of gameplay

What is the importance percentage of each of the following elements:

1. Luck \_\_\_\_not important\_\_\_\_\_
2. Strategy \_\_\_\_important\_\_\_\_
3. Diplomacy \_\_\_\_not important\_\_\_\_
4. Resource management \_\_very important\_\_\_
5. Territory control \_ important\_\_

Also describe how the game is played and how dominant strategies are avoided, if applicable.  
(5-8 sentences)

## 8. Goal

Describe the final objective of the game. (1-2 sentences)

Protect the crystal from being attached from enemies.

## 9. Simplicity and consistency

s. (4-6 sentences)

## 10. Audience

Age group, demographics, any other audience characteristics. (1-2 sentences)

## 11. Platform, Language, Libraries, APIs

Remarks on how you plan to implement your game and what you plan to use. (3-4 sentences)

We plan to use pure C++ with the “EasyX” libraries to process the image we used first. But if we found that is too hard, we will choose to use unity as an alternative since the game is originally designed by unity.

## 12. Focus of development and algorithm challenges

What aspects will you focus mostly on? What algorithms or other challenges you plan to program directly? What do you plan to incorporate using existing libraries or engines? (8-10 sentences)  
  
In answering, you may consider any of the below if applicable to your game:  
Rendering, Modeling, Physics, Audio, AI players, Networking, any others that come to mind.

## 13. Additional information

Optional section. You may include other information about your game that is not described above (e.g., screenshots of related games used for inspiration, drawings of your game world that may help better understand the game, …)