

## 1. Project Description

- What kind of game are you planning to build?
  - i. A battle royale Crazy Arcade-like game
- What are the goals of the game, how do players win, how do they lose?
  - i. The goal of the game is to be the last survivor. The player wins if he/she is the last character alive, loses if he/she dies.
- What are the interesting or unique aspects to your game?
  - i. Introducing the concept of shrink circle, players must avoid standing on the marked place.
- What are the list of features of your game? Prioritize them into at least three categories: "Must Have", "Would Be Really Nice", and "Cool But Only If Ahead Of Schedule".
  - i. Must Have:
    - 1. Graphics:
      - a. Terrain editor
      - b. Skybox
      - c. Player / obstacle / item model
    - 2. Player:
      - a. Stick figure for each player
      - b. Motion control
      - c. Sphere in there-person view
      - d. Equipments appears after the player bombs obstacles
    - 3. Gameplay
      - a. Map generation
      - b. Metrics of props (including max number of bombs available, how powerful the bombs are, etc.)
      - c. Equipments appears after the player bombs obstacles
  - ii. Would be Really Nice:
    - 1. Shrinking circle
    - 2. Full map on a corner of the screen
    - 3. Images for each player
  - iii. Cool But Only If Ahead Of Schedule:
    - 1. Background music
    - 2. Single player mode support

## 2. Group Management

- What are the major roles in your group's management?
  - i. We work as a group. Any decision that impacts the whole game will be made with all members of the team. Decisions of implementation details can be made at one's discretion.
- How will decisions be made? By leader, consensus?
  - i. By consensus
- How will you communicate and collaborate online?
  - i. We are using a Google Shared Drive to store all the documentations.

- ii. We are using a Github repository to share all the code.
  - iii. We are using Wechat for daily communication.
- How will you know when you're off schedule, and how will you deal with schedule slips?
  - i. One can know they are off schedule when other teammates' work is strictly dependent on their unfinished work, such that other teammates cannot continue unless the unfinished work is finished.
- Who will produce the weekly group status reports?
  - i. We will have meetings each week, on which the progress is shared. We will thus produce the weekly group status report by having each person completing their own parts.
- 3. Project Development
  - What are the development roles and who will handle them?
    - i. Arts/Music/Sound Effect/Modeling: Siqi Jiang
    - ii. Graphics: Xincheng Shen, Jamie Song, Mingjie Zhu
    - iii. Gameplay/Logic: Yuxiao Ran, Kaihan Zhu, Jamie Song, Siqi Jiang
    - iv. Network: Kaihan Zhu, Yuxiao Ran
  - What tools will you use?
    - i. Network: Winsock
    - ii. Graphics: OpenGL
    - iii. Arts: Blender/PhotoShop
    - iv. Project Management: Trello
  - How will you do testing?
    - i. Each member will be responsible to test their own features before the meeting
    - ii. During the group meeting, after everything is merged, we will perform a group integrated test
  - How will you do documentation (both internal group documentation as well as external player documentation)?
    - i. We will be using Google Drive to write documentations and each group member will be responsible for creating a standardized documentation for the part he/she works on. For external player documentation, we will try to embed that into our game under a Help tab.
- 4. Project Schedule
  - Define a set of milestones with a specific definition of what each milestone is, what it means to complete each milestone, and when you expect to complete them. Define the milestones at two scales, a high level set of key milestones like integration and design freeze, and a low level set of weekly milestones.

Time	Graphics	Client	Network	Milestone
Week2 Sunday	Get familiar with	Get familiar with	Get familiar with	

	tools, start basic rendering	tools	tools, start basic server	
Week3 Sunday	Generate basic maps with hidden props; Create figures and models	Basic server, simple logic design	Set-up basic server	Basic Multiplayer Game
Week4 Sunday	Create a moving sphere with the player; Able to show models in game	Game logic design	Network integration	
Week5 Sunday	Able to show actions by the player	Advanced ui design	Able to calculate metrics based on game progress	Feature Freeze
Week6 Sunday	Testing	Testing	Testing	
Week7 Sunday	Testing	Testing	Testing	
Week8 Sunday	Testing	Testing	Testing	
Week9 Sunday	Testing	Testing	Testing	
Week10 Sunday	Testing	Testing	Testing	Done

The goal is to make a plan at the outset, but nothing is set in stone. Many things you plan now will be changed as reality imposes itself, but the more seriously you take the planning now the more productive you'll be at getting it done. **Do not** think of this as just another course

makework assignment. This is something that you should feel in your soul is an integral part of building your system. It is your blueprint for a successful project for the quarter.