

# CS3216 Progress Report 2

Team 3 - Soon Chun Mun, Le Viet Tien, Soedarsono, Tay Yang Shun

## 1. Application Prototype

### Nutty Ninjas

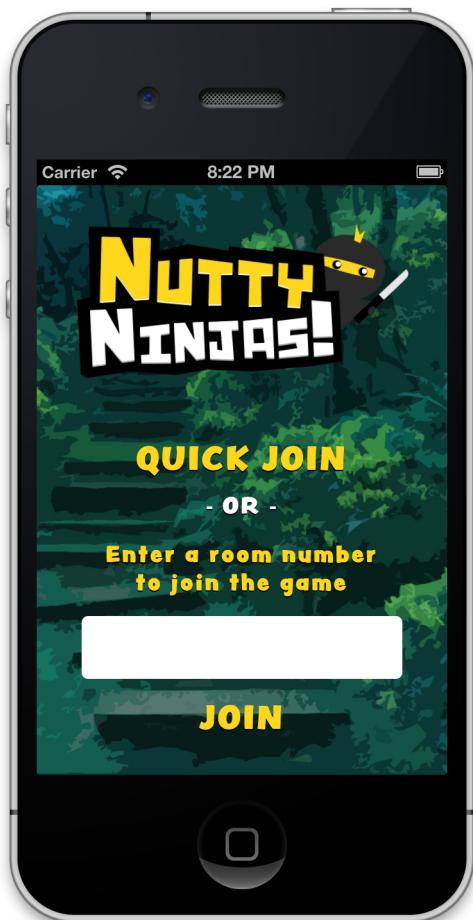
We have built a prototype of our game, **Nutty Ninjas**, leveraging on the various prototypes that we have built earlier. Players will first open a common gameplay screen on their web browser, which will be the common game state that all players will see. Players will then open the controller URL on their mobile phone browser, and will use their mobile phone as a controller to control their avatar in the game.

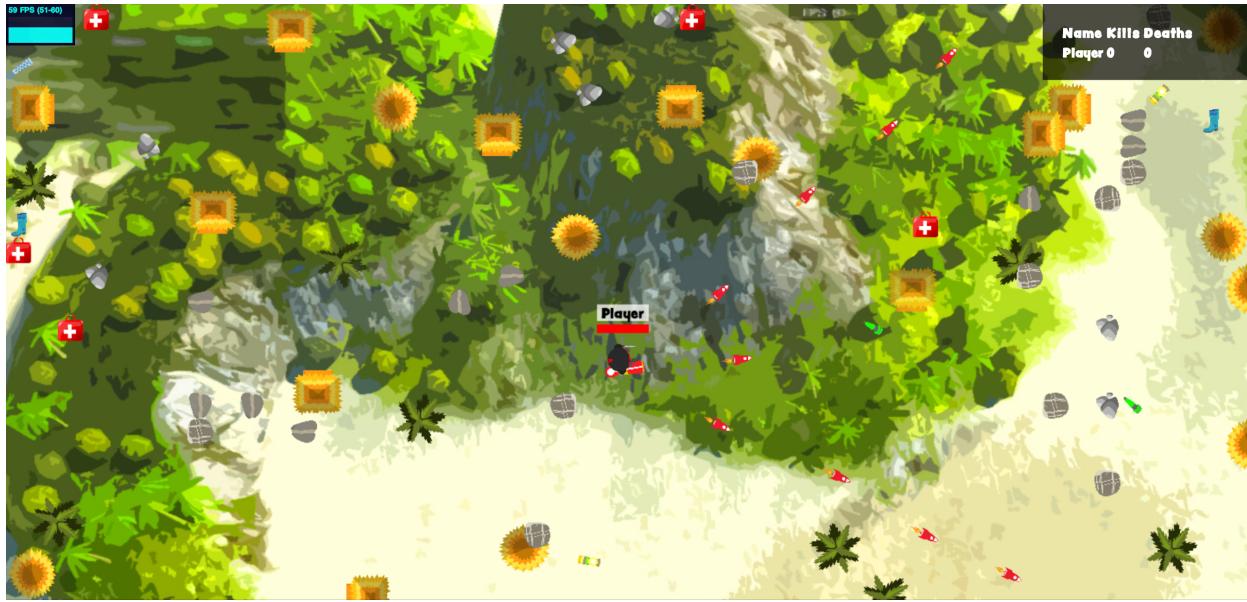
**Nutty Ninjas** is a top down, deathmatch shooter. The objective of the game is to kill other Ninjas in the game Arena.

Some features of our game:

1. Grid map system, that can generate random maps or load a predefined map.
2. Collidable obstacles/tiles, that can have the following properties:
  - a. Destructible, such as trees.
  - b. Affect Ninjas, such as lava (damages the Ninja that is standing on top of it).
3. Powerups that affects the state of the Ninja. Some example:
  - a. Increases the speed of the Ninja. (Temporary effect)
  - b. Restore the hit point of the Ninja. (Permanent effect)
4. Different type of weapons. Ninjas can pick up different weapons, and each weapon have different properties and projectile.
5. Leaderboard, which tracks how many kills each Ninja have.

Screenshots Galore





**2. Is your project on schedule according to the milestones and timelines submitted in the initial project proposal? If you are on schedule, great! If not, why not? What is your team doing about the slip in your project schedule?**

We are mostly on schedule according to the timeline submitted in Progress Report 1. We have implemented most of the features that has stated in the timeline, and we have a basic game to demonstrate our game idea.

We will be continually improving on the gameplay, introducing additional features that would be fun, and seek out high quality assets to integrate into the game.

**3. What were the problems/difficulties your team has encountered? How have you overcome them, or what plans do you have to overcome them?**

There was a technical leap leading from our first prototype that is non-extendable to a more structured system. We have managed to overcome the initial problem of finding a fun game to make. However incorporating the disparate ideas into a cohesive and enjoyable experience has been difficult without much game development experience.

### Controller UX

Directing the user to the correct game room, entering their names, choosing their team before showing them the controller interface are just some of the tasks that players have to do before they get to their game. One consideration is to make this as painless and barrier-free as possible, while taking into consideration that typing is extremely difficult on a phone. We plan to

progressively iterate through several designs while doing user-testing on our target audience.

#### **4. Any changes to the application since the initial project proposal?**

There have been no change to the gameplay since our first progress report, and we are progressing along our proposed idea of a Ninja themed top-down shooter.

We have decided to allow only one active screen at the same time. We realize that there were huge technical difficulties involved in synchronizing between multiple screens, and resolving these issues would take far too long. For the scope of CS3216, we would like to focus on colocated single-screen gameplay, which we think will be the most common form of multi-user gameplay for this type of games.

#### **5. Assuming that your team has already deployed a prototype of your application, how has the response been? Any other new insights, plans or strategies your team has come out with?**

##### Gender Bias for the Game

We have met up with LambdaMu Games, our mentor for the project, and so far their biggest concern was that a Ninja-themed shooter would cut our possible audience by half, as females are less likely to play a shooter game.

We will be following up with them this week (Week 12), to discuss whether there can be some tweaks in gameplay that would make the game more appealing to females.

##### Possible release of API

There is currently some interest for the API that is driving Nutty Ninjas. As the ultimate goal of our project is to build a platform for others to create their own game, we would definitely look into the possibility of cleaning up the architecture code and providing a basic API for other developers to develop simple games on the platform.

#### **6. Project schedule (Consistent with Progress Report 1)**

Phase	Period	Details
3	2 weeks	Nutty Ninja v0.1 - second iteration
	21/10 - 27/10	<p>Network layer:</p> <ul style="list-style-type: none"><li>• Join and leave the lobby</li><li>• Message passing between controllers, server and screens</li></ul> <p>Game:</p> <ul style="list-style-type: none"><li>• Lobby system</li><li>• A copy version of Battle City</li></ul>

		<ul style="list-style-type: none"> <li>• Basic integration with Box2D</li> <li>• Splash screen</li> <li>• Ninja themed assets</li> </ul>
	28/10 - 3/11	<p>Server:</p> <ul style="list-style-type: none"> <li>• Manage all running rooms</li> </ul> <p>Network layer:</p> <ul style="list-style-type: none"> <li>• Optimize for speed/real-time factor</li> <li>• General improvement</li> </ul> <p>Game:</p> <ul style="list-style-type: none"> <li>• Advanced features (traps, power up, etc)</li> <li>• Advanced graphical assets</li> <li>• Optimize for speed/real-time factor</li> <li>• General improvement</li> </ul>
	<i>Achievement</i>	<i>Network layer v0.1</i> <i>Game v0.1</i>
4	1 week	“To the new world” - third iteration
	4/11 - 10/11	<p>Network layer:</p> <ul style="list-style-type: none"> <li>• Implement game resource</li> <li>• Abstract away common set of signals to an interface that other game libraries can follow</li> </ul> <p>Game:</p> <ul style="list-style-type: none"> <li>• Decouple from network layer</li> <li>• Modify to conform the newly interface</li> </ul>
	<i>Achievement</i>	<i>Network layer v0.2</i> <i>Game v0.2</i>
5	1 week	Finetuning
	11/11 - 17/11	Final user testing Bug fixing + code refactoring Documentation + final report Promotion + advertisement
	<i>Achievement</i>	<i>Ready for showcase!</i>