Jonathan Tang

	Expected hours	Hours consumed	Status	
Create a task diagram	1	1	In progress	
Create cutting points list	1	1	In progress	
Create the maze and holes	5		Not yet started	
Create a marble that is control by the physics task	5		Not yet started	
Gyro task to control marble movement	5		Not yet started	
Button task to enable physics disrupter.	5		Not yet started	
Physics task that controls of velocity, energy, recharging rate	8		Not yet started	
Debugging, unit testing, etc	14	1	In progress	

Unit tests:

Cutting points:

1. Ball movement checks: The gyro, button, physics, all affects the movement behavior of the drone. Therefore, we want to add unit tests for each task specifically to check whether the task interacts with the drone properly.

2. Energy consume and recharge task: The energy is constantly consumed and recharged. Careful checks for energy behavior is essential.

Functional tests:

1. Maze display test: The LCD displays the mazes and holes correctly.
2. Maze randomization test: Different mazes are displayed throughout tests.
3. Button test: The interrupt is correctly configured and the button works.
4. Gyro test: The gyro is correctly configured and the button works.
5. LCD Timer check test: The timer that refreshes LCD runs and updates the LCD periodically.
6. Energy mutex test: Energy data is initialized properly and the mutex protects the data.
7. Ball mutex test: ball data is initialized properly and the mutex protects the data.
8. Physics test: The gyro and buttons correctly interact with the ball with the correct physics.

Summary statement:

- In this week I have made a task plan, task diagram, created cutting points and also made a risk assessment table. I have not implemented any code yet.

- In week 2, I got some more clarifications on the project. Planned more functional tests and had a better vision on the project. I have not implemented any code yet.

Summary effort:

- In week 1, I worked 2 hours on a task plan, task diagram, cutting points and a risk assessment table. Therefore I completed 4.5% (2/44) of the project. Expected hours for these completed tasks were 2 hours (2/2), which is 1.00x the rate I expected.

- In week 2, I worked 1 hour on functional test planning. Therefore I completed 6.8% (3/44) of the project. Expected hours for these completed tasks were 3 hours (1/3), which is 0.33x the rate I expected.