

Milestone 2

Major Features:






















- In App Notification: The gamers will receive a notification whenever a target is spotted.
- Flying Drone: The drone will have the ability to fly and be controlled by players.
- Identification of QR Codes: each player will have a unique QR code as an id.
- Geolocation: Geolocation integration connects players to the drone.
- Mobile Support: Gamers can use their phone to play the game and send their scores to the server.
- User to user Interaction: each user can interact with the drone and the other player(s) as they try to scan their code with the drone

Requirements:

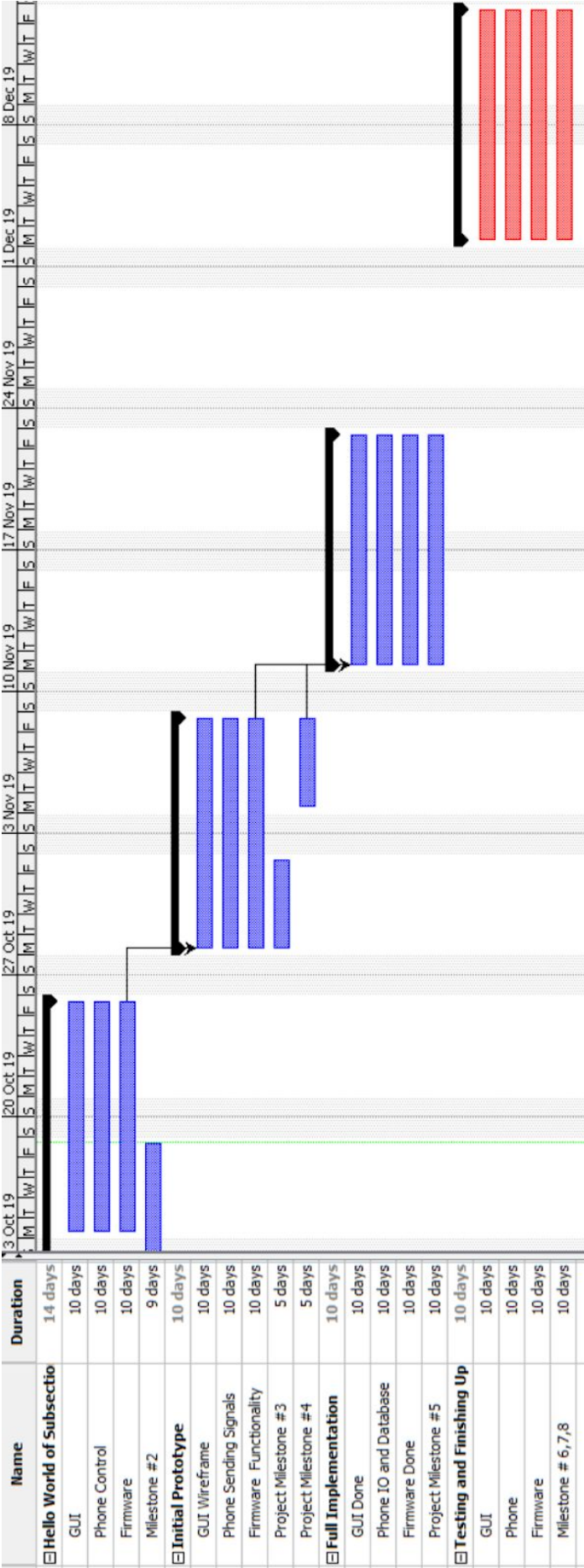
Feature	User Story	Acceptance Criteria
In App Notifications	<ul style="list-style-type: none">→ As a gamer, I need to be notified when I received a drone hit so that I can keep track of my player stats.→ As a drone enthusiast, I need to be notified when my drone identifies a tag so that I can keep track of my drone's position.→ As an outdoor enthusiast, I need to be notified when my drone hits its target so that I can move to another stage efficiently.→ As a drone game administrator, I need to be able to oversee the game via push notifications.	<ul style="list-style-type: none">→ Gamer<ol style="list-style-type: none">1. Login to user portal.2. Navigate to player stats3. Be able to select stats and read about their subcomponents.→ Drone Enthusiast<ol style="list-style-type: none">1. Login to user portal.2. Navigate to drone stats.3. Be able to read drone stats and health using the application.→ Outdoor enthusiast<ol style="list-style-type: none">1. Login to the user portal2. Navigate to sites and settings.3. Be able to see through the drone data stream and view the drone's perspective.→ Drone Administrator<ol style="list-style-type: none">1. Login to the admin portal.2. Navigate to user preferences.3. Navigate to User statistics.4. Be able to request data from the main database and interact with user data.
Flying Drone	<ul style="list-style-type: none">→ As a gamer, I need the drone to fly to be able to play the game.→ As a drone enthusiast, having a flying drone is everything. Without the drone I'm out.→ As an outdoor enthusiast, the flying drone allows me to play the game outside, so I need the flying feature to be up and running.→ As a drone game administrator, I	<ul style="list-style-type: none">→ Gamer<ol style="list-style-type: none">1. Fly the drone throughout the game2. Login to the portal3. Have the drone communicate with the mobile phone→ Drone Enthusiast<ol style="list-style-type: none">1. Login to the user portal2. Fly the drone to participate in the game

	<p>need to have the drone flying so that my game is a success.</p>	<p>3. Navigate through the app to see stats and settings</p> <p>→ Outdoor Enthusiast</p> <p>1. Login to the portal and view stats and settings</p> <p>2. View the drone's perspective</p> <p>→ Drone Administrator</p> <p>1. Login to the admin portal</p> <p>2. Navigate to see user stats and drone functionality</p>
Identification of QR Codes	<p>→ As a gamer, I need to identify each player in the game, so that I can play the game.</p> <p>→ As a drone enthusiast, I need to know which player is my target, so I can chase them.</p> <p>→ As an outdoor enthusiast, I need to know which players are on my team.</p> <p>→ As a drone game administrator, I need to have the drone scan QR codes so that players can be tagged and the game functions properly.</p>	<p>→ Gamer</p> <p>1. Have instant access to the streaming camera</p> <p>2. Navigate to the camera section and pick basic settings such as resolution and depth.</p> <p>→ Drone Enthusiast</p> <p>1. Be able to identify april tags / QR Codes.</p> <p>2. Have an applicable course set up to navigate through.</p> <p>→ Outdoor enthusiast</p> <p>1. Be able to traverse the wilderness and place april tags in a desired location.</p> <p>2. Be able to monitor the location of tags using the drone camera.</p> <p>→ Drone Administrator</p> <p>1. Be able to monitor tag lifetimes.</p> <p>2. Have a database storing the identification of QR Codes and their respective statistics.</p> <p>3. Log into admin portal</p> <p>4. Navigate to tag settings.</p>
Geolocation	<p>→ As a gamer, I need to know where the players and tag is.</p> <p>→ As a drone enthusiast, I need to track my drone and not to lose it.</p> <p>→ As an outdoor enthusiast, I need to realize how dangerous the place that i want to go.</p> <p>→ As a drone game administrator, I need to have my players know where they are so they can navigate.</p>	<p>→ Gamer:</p> <p>1. Identify their position relate to drone's position</p> <p>2. Find drone by notification from game</p> <p>→ Drone Enthusiast</p> <p>1. Identify their position relate to drone's position</p> <p>2. Identify situation around drone</p> <p>3. Find drone by notification from game</p> <p>→ Outdoor enthusiast</p> <p>1. Identify their position with drone's position</p> <p>2. Identify situation around drone</p> <p>3. Identify ground situation around drone</p> <p>4. Find drone by notification from game</p> <p>→ Drone Administrator</p> <p>1. Login to the admin portal</p>

Mobile Support	<ul style="list-style-type: none"> → As a gamer, I need to be able to play the game on my phone to maximize functionality. → As a drone enthusiast, I need to be able to connect to the drone via a mobile phone to play the game. → As an outdoor enthusiast, I need to be able to connect the game with a mobile phone to be able to go outside and truly enjoy the game. → As a drone game administrator, I need mobile support to be up and running or else the game does not work. 	<ul style="list-style-type: none"> → Gamer: <ol style="list-style-type: none"> 1. Easy access to the game everywhere. 2. Support more than one mobile system. 3. Being able to play the game with at least 2 players. → Drone Enthusiast: <ol style="list-style-type: none"> 1. Check the drone status. 2. Change setting easily. 3. Control the settings efficiently. → Outdoor Enthusiast: <ol style="list-style-type: none"> 1. Play the game everywhere. 2. Being able to take videos and pictures while playing. 3. Being able to locate player and the drone without the controller. → Drone Administrator: <ol style="list-style-type: none"> 1. Can take off and land without the controller. 2. Pull a map to locate players and the drone. 3. Login to admin portal using only a mobile.
User to User Interaction	<ul style="list-style-type: none"> → As a gamer, I need to be able to interact with other players throughout the game. → As a drone enthusiast, I need to be able to fly the drone and have fun doing it throughout the game. → As an outdoor enthusiast, I need to be able to get some fresh air and still play this fun game. → As a drone game administrator, I need users to be able to interact with each other so my game runs smoothly. 	<ul style="list-style-type: none"> → Gamer <ol style="list-style-type: none"> 4. Login to user portal. 5. Navigate to player stats 6. Be able to select stats and read about their subcomponents. → Drone Enthusiast <ol style="list-style-type: none"> 4. Login to user portal. 5. Navigate to drone stats. 6. Be able to read drone stats and health using the application. → Outdoor enthusiast <ol style="list-style-type: none"> 4. Login to the user portal 5. Navigate to sites and settings. 6. Be able to see through the drone data stream and view the drone's perspective. → Drone Administrator <ol style="list-style-type: none"> 5. Login to the admin portal. 6. Navigate to user preferences. 7. Navigate to User statistics. 8. Be able to request data from the main database and interact with user data.

	Name	Duration	Start	Finish
	 Hello World of Subsection	14 days	10/8/19 8:00 AM	10/25/19 5:00 PM
	GUI	10 days	10/14/19 8:00 AM	10/25/19 5:00 PM
	Phone Control	10 days	10/14/19 8:00 AM	10/25/19 5:00 PM
	Firmware	10 days	10/14/19 8:00 AM	10/25/19 5:00 PM
	Milestone #2	9 days	10/8/19 8:00 AM	10/18/19 5:00 PM
	 Initial Prototype	10 days	10/28/19 8:00 AM	11/8/19 5:00 PM
	GUI Wireframe	10 days	10/28/19 8:00 AM	11/8/19 5:00 PM
	Phone Sending Signals	10 days	10/28/19 8:00 AM	11/8/19 5:00 PM
	Firmware Functionality	10 days	10/28/19 8:00 AM	11/8/19 5:00 PM
	Project Milestone #3	5 days	10/28/19 8:00 AM	11/1/19 5:00 PM
	Project Milestone #4	5 days	11/4/19 8:00 AM	11/8/19 5:00 PM
	 Full Implementation	10 days	11/11/19 8:00 AM	11/22/19 5:00 PM
	GUI Done	10 days	11/11/19 8:00 AM	11/22/19 5:00 PM
	Phone IO and Database	10 days	11/11/19 8:00 AM	11/22/19 5:00 PM
	Firmware Done	10 days	11/11/19 8:00 AM	11/22/19 5:00 PM
	Project Milestone #5	10 days	11/11/19 8:00 AM	11/22/19 5:00 PM
	 Testing and Finishing Up	10 days	12/2/19 8:00 AM	12/13/19 5:00 PM
	GUI	10 days	12/2/19 8:00 AM	12/13/19 5:00 PM
	Phone	10 days	12/2/19 8:00 AM	12/13/19 5:00 PM
	Firmware	10 days	12/2/19 8:00 AM	12/13/19 5:00 PM
	Milestone # 6,7,8	10 days	12/2/19 8:00 AM	12/13/19 5:00 PM

For each two week period, we will have one sprint per week. In our weekly meetings, we will have stand-ups that describe what our progress we have had in our sprints. We will have our features done by the end of the semester if we keep on track with the schedule that is presented. In the event, we fall behind, our meetings will discuss how we can either catch up or change the scope of the project so it is done by the end of the semester.



Teams	Developers
GUI	Ryan, Zixin
Mobile Integration	Layan, Dudley
Firmware	Theo, Connor