Team Projects 2
Meeting of Minutes W02
Date: 01/31/2023

Time: 8:20 - 8:50

Attendees/Role:
Member #1: Adonis Davis
Member #2: Carson Henry
Member #3: Kelly Ngoc Hoang
Member #4: Samuel Jeffries
Member #5: Bailey Wyan

Discussion: Scheduled meeting time adjustments. Found time that works for team to meet virtually for software and documentation development, while waiting for hardware parts. Discussion on progress of current tasking, actions, or assignments.

Product Backlog:

Req No.	Obj No.	Requirement	Verification: T - Test, D - Demonstrate, I - Inspection, A - Analysis
1	1, 2	The system shall include a microcontroller.	
2	1, 2	The system shall include a probe arm.	
3	1, 2	The probe arm shall include a water thermometer.	
4	1, 2	The probe arm shall include a pH sensor.	
5	1, 2	The system shall include a display screen.	
6	1	The TankMate shall record the water temperature within the tank.	
7	1	The water thermometer shall measure temperature from 0-40 degrees celsius.	
8	1	The water thermometer shall be accurate to the hundreth of a degree, as factory defined by the	

		manufacturer.	
9	1	The water thermometer shall record an accurate measurement to the tenth of a degree.	
10	1	The TankMate shall record the pH balance within the tank.	
11	1	The pH sensor shall measure pH from a range of 0 to 14 units.	
12	1	The pH sensor shall be accurate to the hundreth of a unit as factory defined by the manufacturer.	
13	1	The pH sensor shall record an accurate measurement to the tenth of a unit.	
14	1, 2	The system shall include a mobile application.	
15	1, 2	The mobile application shall run on at least one mobile device running a version of the Android operating system.	
16	1, 2	The mobile application shall receive data from the microcontroller.	
17	1, 2	The mobile application shall display the data received to the user.	
18	1, 2	The mobile application shall utilize touchscreen interaction, via mobile device.	
19	1, 2	The microcontroller used within the measurement device shall have integrated bluetooth connectivity.	
20	1, 2	The microcontroller shall connect to Wi-Fi.	
21	1, 2	The microcontroller’s integrated Wi-Fi transmitter shall transmit data at rates as specified by the manufacturer.	
22	1, 2	The microcontroller’s integrated Wi-Fi transmitter shall conform to the range	

		as specified by the manufacturer.	
23	1, 2	The mobile application shall display transmitted data recorded by the probe arm.	
24	2	The display screen shall show temperature and pH readings.	
25	2	The microcontroller shall encrypt the data before sending it to the mobile application.	
26	2	The microcontroller shall utilize a Wi-Fi transmitter to send recorded data to a Wi-Fi signal.	
27	2	The Wi-Fi transmitter shall follow the 47 CFR 5.107 standard under the Code of Federal Regulations.	
28	2	The mobile application developed shall adhere to a recognized coding standard.	
30	2	The TankMate's components shall be compatible with the software development kit.	
31	3	The TankMate shall have a motor-operated probe arm that can move up and down.	
32	3, 5	The TankMates probe arm movement speed shall be harmless to marine life.	
33	3, 5	The probe arm shall be waterproof.	
34	3, 5	The probe arm shall have no sharp edges.	
40	4	A relay shall be included to turn off measurement functions when the probe arm is removed from the water.	
41	4	The system connection shall adhere to IEEE standards.	
50	5	The probe arm shell shall be made from food-safe HDPE plastic.	

51	3, 5	The TankMate shall be attachable to the tank.	
52	3, 5	The TankMate shall be removable from the tank.	
53	1, 2, 5	The microcontroller shall send hourly temperature and pH statistics to a wireless mobile application.	
54	1, 2, 5	The mobile application shall send a displayed alert to the user when the temperature or pH reaches a level that is dangerous to the marine life within the tank.	

Sprint Backlog:

ID	Date Assigned	Assignee	Description	Due Date	Complete Date or OBE	Artifact
1	Jan 16	All	Create and complete Minutes Week 2	Jan 20	Jan 19th	
2	Jan 16	Kelly	Draft the interface mockup	Jan 27	Jan 26th	
3	Jan 9	Carson	Provided final presentation template	Jan 15		
4	Jan 16	Bailey, Adonis, Carson	Created rough draft for the final presentation	Jan 27	Jan 24th	
5	Jan 9	Sam	Create Minutes Week 2	Jan 15		
6	Jan 9	Sam	Develop mock software for components	Jan 27	Jan 24th	
7	Jan 19	Adonis	Create more detailed hardware connection diagram	Jan 27	OBE	
8	Jan 9	Sam, Kelly	Download Android Studios and create “main” file	Jan 20th	Jan 18th	
9	Jan 24	Sam, Kelly	Demonstrate a draft of the interface in Android Studios to the team	Feb 10th		
10	Jan 26	Carson	Create Raspberry Pi Desktop VM, establish SSH connection to the network (encryption)	Feb 10th		

	example of writing actions:					
	https://pilot.wright.edu/d2l/le/content/668247/viewContent/4410227/View					

Actions for Team Week Start 01/20/23:

Kelly:

- Demonstrate a draft of the interface in Android Studios to the team

Samuel:

- Finished developing mock raspberry pi code
- Started working on issue #8 in GitHub "Create a Prototype interface of the app in Android Studios | Due Feb 10"

Bailey:

- Sensor Relay mock code Due 02/02
- Schedule updating discussion
- Meeting of minutes submission

Adonis:

- Create detailed hardware document - Due 01/27

Carson Henry

- Create Raspberry Pi Desktop VM - Due Feb. 10

Week Finish: 01/24/23