Logbook

This is your logbook. Insert here all relevant information regarding the evolution of your project

Meetings

1st Meeting (2014-02-27)

Agenda:

1. Presentation
2. Modus operandi
3. Project proposals
4. Electronic Logbook

Minute:

The team familiarized with the Wiki and the first discussion about the project took place. A list of suggested questions for the first official meeting with supervisors was created.

2nd Meeting (2014-03-06)

Agenda:

1. Available materials (aquaponic system, water pump…)
2. Environment of use (salt or tropical water, kind of plants…)
3. Technology (interface, components…)
4. Marketing (commercial, household, budget…)
5. Open questions

Minute:

The supervisors answered most of our questions. They guided us in the direction we have to go to develop the aquaponic system. Making the system work is the main task but sensors will be required to take readings in the system. We were informed that we will be given fish to use for our project from a member of staff at ISEP.

3rd Meeting (2014-03-13)

Agenda:

1. Can we organise some visits? (Aquarium, Biology laboratory)
2. Present our ideas (Herbs for cooking,fish to eat)
3. What kind of fish are available?
4. What is the exact model of our pump?(really important to design)
5. Can we change the needed materials?

Minute:

During this meeting our idea about the aquaponic system for a kitchen was approved. We were also given the information to get in touch with Paulo in order his custom made aquarium and his fish. We were also told the name of the fish that we will receive to use for our project in order to do som research. The material list must be finalised soon but there will be some time for editing later in the month if we have any change to design.

4th Meeting (2014-03-20)

Agenda:

1. What is the part: Functional test ?
2. Hand made or ready made tank buy ourselves ?
3. Prototype or to sell a product ?
4. Open questions about prototype or sell product.

Minute:

Our query about whether the system is to be a prototype or to sell on a mass scale was answered. We will now finalize our design and produce our material list for our aquaponics prototype. We have been informed that we can build our own custom tank with materials given from the university or buy an existing tank. We will also work on our functional tests and update on the wiki, all the specifications that we want our system to have.

5th Meeting (2014-03-28)

Agenda:

1. Where can we get our materials from? Sources for material list.
2. When can we collect the water pump?
3. Design Photo
4. Open points

Minute:

We were informed that the materials should be purchased in a Portuguese website or shop. The university can provide us with the water pump and we can collect in in the next week. Our first design is really nice but we have to improve it. We now need to consider the possibility of having a cylindrical aquarium. We have arranged a meeting with Pablo Ribeira to learn more about how to build a good aquarium.

6th Meeting (2014-04-03)

Agenda:

1. How long should presentation last? 15 minutes?
2. When will the materials arrive?
3. Change of design - not cylindrical.
4. Sensors - only temperature and pH?
5. Waiting for tank price.

Minute:

We were told that our interim presentation is to last around 10-15 minutes and we discussed some information about preparing and making a correct presentation. The materials should arrive in approximately one month. We were told that it is preferred to have an automatic system compared to the manual so we must consider a main interface for our sensors (micro-controller). In the next weeks we must evaluate our new design and update our material list.

7th Meeting (2014-04-10)

Agenda:

Interim presentation

Minute:

We performed our presentation to all of our supervisors in order to receive feedback on our progress. Opinions from each supervisor were given to us in order to improve our performance and focus on any weaknesses before we present our final product. We were given feedback on our slides, speaking and report.

8th Meeting (2014-04-30)

Agenda:

1. Updated first version of final report with supervisors' corrections.
2. For each supervisor, as stakeholders what do you expect of our project?
3. When are you providing the materials?

Minute:

Some supervisors answered the question about team building course and they said us we need to update the material list.

9th Meeting (2014-05-07)

Agenda:

1. Engineering drawing required?
2. Will the workshop be able to produce the tray from acrylic?
3. Power consumption (Sleep mode and run mode help)

Minute:

We were given help with the electronic part of the project. We were told we must produce a block diagram and then a schematic of the components. We were also told of a software we can use to simulate the circuit. In the next weeks, we will be allocated a time for using the university workshop to build our acrylic tray.

10th Meeting (2014-05-15)

Agenda:

1. Could we bring the material? (fish tank, acrylic staff)
2. What do you expect in the report about electronic components? All components' details (physics and electronics) or just why we chose those components ?
3. Do you know an other software to draw our electronic plan ? “123Circuit” is not enough to draw what we need.

Minute:

During this meeting we were informed that the tank and the acrylic were available to collect at our supervisors office. It was made clear what is required of us regarding the electronic section of our report. We must include the architecture- block diagrams, detailed circuitry, a description of each section, its function and why we chose it. We also discussed some different software's that we could use for our simulations and drawings.

11th Meeting (2014-05-22)

Agenda:

1. Standard/Quality of prototype?
2. Estimate on when materials will arrive?
3. Deadlines and official submission date
4. Look at design images.

Minute:

In this meeting our supervisors gave us their expectations on what our finished product should look like as we had concerns on the quality of the finish our prototype will have. Our prototype goal is just to have a working structure whereas the finished product has a high standard of design. We were advised to build a scaled cardboard structure of our product while we wait on our final parts. This is to give us an idea that everything fits well together before we start to build in the workshop. We now have to think about some issues that were raised about our design images.

12th Meeting (2014-05-29)

Agenda:

1. Placement of electronic components
2. Cardboard model
3. Check final technical drawings
4. Questions about video

Minute:

Supervisors agreed to the solutions we proposed. Final technical drawings were confirmed.

13th Meeting (2014-06-05)

Agenda:

1. Check cutting list
2. Check project development (simulations, components)

Minute:

Cutting list is correct. Project development needs to be completed.

14th Meeting (2014-06-12)

Agenda:

1. How long should our final presentation last?
2. Is the glossary only for explaining abbreviations or other terms too?
3. Did our materials arrive?
4. How long should the video be?

Minute:

Presentation shouldn't take more than 15 minutes including the video.

Glossary can include terms different than abbreviations too.

We were told to wait until next week for the materials.

Activities

Please register here all project activities

Start	End	Task	Description	Who
27/03/14	03/04/14	Choose a subject for the project	Discussion with the team	All
01/04/14	02/04/14	Update Wiki		Gwen
03/04/14	04/04/14	Implementation of Gantt chart	Software	Sean and Arlene
04/04/14	04/04/14	Define of the Task		All
15/04/14	15/04/14	Report	State of the art : First introduction	Gwen
14/03/14	15/03/14	Report	Introduction	Natalia and Sean
24/03/14	25/03/14	Report	State of the art & Sustainability	Gwen
27/03/14	27/03/14	Report	Introduction : Structure	Sean
31/03/14	31/03/14	Logbook	Weekly Report: Structure & itemize	Anna
27/03/14	31/03/14	Report	Marketing Plan (part 1)	Natalia
02/04/14	02/04/14	Logbook	Adding/Updating Material list and Agenda	Arlene
03/04/14	03/04/14	Report	Ethics and Deontology : Sales	Sean
04/04/14	05/04/14	Report	State of the art & Sustainability	Gwen
05/04/14	06/04/14	Report	Ethical and Deontological Concerns	Anna
06/04/14	06/04/14	Report	Communication of Report	Sean and Arlene
06/04/14	06/04/14	Report	State of the Art & Project Development & Ecological and Sustainability	Sean
25/04/14	27/04/14	Deliverables	First version of the final report	Gwen
28/04/14	28/04/14	Update Wiki	Added the part “Project management”	Gwen

Start	End	Task	Description	Who
28/04/14	28/04/14	Leaflet	Finished and uploaded	Anna
29/04/14	30/04/14	Report	Marketing Plan (Marketing mix)	Natalia
09/04/14	12/04/14	material list	finished and uploaded	All
23/04/14	26/04/14	Report	Project development simulations and electronic drawing	Gwen
15/05/14	15/05/14	Report	Project Management	Sean
20/05/14	28/05/14	Report	components	Anna
1/06/14	3/06/14	Report	Project management	Gwen and Anna
4/06/14	4/06/14	Report	Project Development : Add Renders/Complete Development section	Sean
6/06/14	10/06/14	Report	Marketing Plan (part 3 and corrections)	Natalia
08/06/14	10/06/14	Report	Complete sections : Project Development and Conclusions	Sean
08/06/14	08/06/14	Report	Finalise Communication within Report	Sean
12/06/14	14/06/14	Paper	State of the Art, Project Development, Conclusion, Future development	Natalia
14/06/14	14/06/14	Deliverables	Uploaded Final Report and Final Paper	Sean
15/06/14	15/06/14	Workshop	Cutting the acrylic for the growbed	Sean & Natalia
20/06/14	20/06/14	Workshop	Assembling the growbed	Anna, Gwen & Natalia

Material list

Component	Description	Company	Informations	Source/Supplier Website	Quantity	Price (€)
Motherboard	Arduino Duemilanove *Model: ARDU-0004*	InMotion	http://www.inmotion.pt/store/arduino-duemilanove	Provided by Abel Duarte	1	20
Temperature Sensor	Waterproof (DS18B20) *Model:INM-0494*	InMotion	http://www.inmotion.pt/store/temperature-sensor-waterproof-(ds18b20)		1	8,95
pH Sensor	ASP200-2-1M-BNC pH Lab Electrode	InMotion	http://www.inmotion.pt/store/asp200-2-1m-bnc-ph-lab-electrode		1	26,95
Control sensors interface	PhidgetInterfaceKit 8/8/8 *Model: PHD-1018_2*	InMotion	http://www.inmotion.pt/store/phidgetinterfacekit-888		1	65
LCD Screen	LCD Module 16x2, Black on Green *Model: INM-0751*	InMotion	http://www.inmotion.pt/store/lcd-module-16x2-black-on-green		1	5,95
pH/ORP adapter	pH/ORP Adapter *Model: PHD-1130*	InMotion	http://www.inmotion.pt/store/phorp-adapter		1	27,95
Current driver	ULN2003	N/A	http://www.engineersgarage.com/electronic-components/uln2003-datasheet	Provided by ISEP	1	-
Power supply	Power supply 5V, 2.5A *Model: INM-0761*	InMotion	http://www.inmotion.pt/store/power-supply-5v-2-5a-eu-with-dc-plug	Provided by ISEP	1	10,95
Relay	FINDER - 36.11.9.005.4001 - RELAY, PCB, SPDT, 5VDC, 10A	N/A	http://uk.farnell.com/finder/36-11-9-005-4001/relay-pcb-spdt-5vdc-1(	Provided by ISEP	1	-
LED Lights	Addressable RGB 30-LED Strip 5V 1m, WS2812B	InMotion	http://www.inmotion.pt/store/addressable-rgb-30led-strip-5v-1m-ws2812b		1	17,95
Water Pump	Syncra Silent 0.5 Multifunction Pump	Sicce	ttp://www.sicce.com/prodotti/Dettaglio_eng.php/prodotto=syncra-10-mt.-0.5-1.0-1.5/idprodotto=1	Provided by ISEP	1	-
Fish	Amatitlania nigrofasciata *(Convict cichlid)*	N/A	http://en.wikipedia.org/wiki/Convict_cichlid	Provided by Paolo Ribeira	4	-
Pipes	Acrylic connecting pipes to water pump	Dagol	http://www.dagol.pt/uk/html/outros_produtos.html		1	-
Grow Bed	Plastic trays	N/A	N/A	Provided by ISEP	1	-
Clay Pebbles	Expanding clay pebbles	Leroy Merlin	http://www.leroymerlin.pt/Site/Home.aspx	Leroy Merlin	2kg	1
Herbs	Basil, Rosemary and Thyme	Bolhao Market	N/A	Bolhao Market	2	5
Fish Food	Regular fish flakes	Jumbo	http://www.jumbo.pt/Frontoffice/ContentPages/JumboNetWelcome.aspx		1	3,19
Tank	Small tank 40x20x35	Jumbo	http://www.jumbo.pt/Frontoffice/ContentPages/JumboNetWelcome.aspx		1	44,9
Sand/Rocks	Small rocks for base of aquarium	Jumbo	http://www.jumbo.pt/Frontoffice/ContentPages/JumboNetWelcome.aspx		1	7,99
Small Inner Tube - Bellsiphon	Prolong Roscado Rec. 1/2"	AKI	http://www.aki.pt/Default.aspx?sid=0		1	0,59
Tubing for pump	Mang Cristal Extra 12x15 1ML	AKI	http://www.aki.pt/Default.aspx?sid=0		1	1,49
Body and Cover - Bellsiphon	Tubo Descarga D50 D32 325MM	AKI	http://www.aki.pt/Default.aspx?sid=0		1	5,39

Materials list: materials.xlsx
DropBox view : https://www.dropbox.com/s/zpdsdx08uycfssf/materials.xlsx