



## ECSE 456 - Turbodega

Project Supervisor: Professor Daniel Varro (daniel.varro@mcgill.ca)

Meetings scheduled on Mondays at 5:00 PM at Armstrong, 3<sup>rd</sup> floor

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Date	Summary of Topics
October 10, 2018	Presented the webpages to the advisors. Received feedbacks and improvements to be made for each page such as arranging bidding page by skus, signup page to include a database to store login information and the landing page should be linked to all the other pages with smooth navigation.
October 15, 2018	Decided to use Firebase as the database to store user login information, created a gmail account for Turbodega and presented the improved webpages. Based on the feedback received like bidding page to include categorized skus, catalogue page to display skus by category and have registration form for signup page, tasks were divided among members to complete by next week.
October 22, 2018	Presented the UI interface. Advisors asked to instead of adding more functionality, work on site appearance to reach our users. Team decided to use Bootstrap template.
October 29, 2018	Presented the modified website using Bootstrap template and the beginnings of a test suite using Selenium. Now for the coming week, the team will work on some minor changes on the site and have some mock tests ready for the near future.

Table 1: Group Meetings and Meetings with Advisors

## Professionalism

Engineering as a practice cannot exist without taking into account its impact on society. As future professionals, we thus have a duty to uphold the safety and well being of the public and of our clients above all other considerations. It is therefore our primordial duty to evaluate if any of the decisions we make will have a negative impact on either. To that end, we plan on reviewing the engineering code of ethics published by the OIQ (Ordre des Ingénieurs du Québec), giving special consideration to Division II and Division III of the text to ensure that we complete the project while maintaining the highest professional standards.

## Team Work

As a team, we have progressed from being a group that did not have background skills in web development to now creating our own active website. Yahya, our lead developer guided us through by for instance suggesting different tutorials to review in order to grasp some basic knowledge on topics like HTML/CSS, Bootstrap and many more that helped us in creating our own pages. Also, he worked on setting up test suites using Selenium. Thusha, our web manager, put everyones individual pages together to have the setup of our website in place and have an easily navigable site. Then, Aliah, our lead designer with the help of Nabil, our content editor, used a Bootstrap theme to make our pages more presentable and responsive. Some key interpersonal skills that have helped us collaborate so far are communication, patience and teamwork. Communication with each other was important to learn about each others strength and weakness to help each other out. Then, with patience, we helped each other learn and as a team, we had each others back for any assistance in completing our assigned individual tasks. We would like to develop skills like open-mindedness, problem solving and creativity to work better together in the future. All these skills will be important when we are progressing with our work because that way we are willing to accept each others opinions and solve problems that we encounter whether it is personal or for the functionality of our site. Also, being creative can help us complete a project that can stand out to meet our clients expectation and have a backend function that is unique and simple.

## Impact on the Environment

After around two more weeks of development, it can be determined that the possible impact on the environment identified has not changed since this is a project that at its core involves web development. The indirect impact through the energy use from using computers, will still be minimal. There will be testing phases throughout the development stage. Suppliers will start trying the website and incorporate it into their day-to-day business of supplying products to their customers. This can be more properly observed when we enter the actual first testing phase itself. Once the software is online it will lead to distribution of products, which require the use of energy from transports. The effects of the project itself will be minimal as it does not really differ from the business regular activities. However, once the product has been fully marketed, in the ideal case, there will be an increased efficiency in distribution leading to faster and greater volumes in the supply of goods. The two possible scenarios identified has not changed. Firstly, where there will be less use of energy to deliver more goods due to the increased efficiency of distribution. The other is that a possible wide-scale adoption of the project product will lead to a significant increase in supplies, which in turn leads to greater use of energy. Higher energy consumptions will indirectly impact the environment from the production of energy. It must be noted that it is not entirely possible to predict the scenario that will happen until the product is actually marketed.

## Ethics and Equity

We did not encounter any further ethical dilemmas during this project nor dilemmas related to equity as of now. Nonetheless, the team members are now aware that there are some possible issues that one may encounter in this kind of project. For instance, during the midterm season when everyone has time constraints in committing to the project. However, this should not be an excuse for anyone to commit any less to the

project. It is important that every member of the team should equally take part in the project and fulfill their responsibilities properly. If one failed to do so, this might lead to a failure in reporting the true progress of the project to the supervisors in fear of repercussions. Hence, it is important to be completely truthful about the progress of the project to our clients and keep up with the timeline. Also, it is possible that conflict can arise among members due to differences in opinion. For example, when the clients demand for a change in the website layout, different opinions may arise in how the layout should be, but this should be negotiated professionally without taking anything too personal and come to a conclusion that benefits every member and respecting everyone's interests. Furthermore, being accountable is important since when things go wrong, it is human nature to try to avoid the consequences and perhaps blame someone else. What can be concluded is that dilemmas may arise when working in this project, but by discussing about possible solutions and by understanding one's responsibility towards the team, the possible ethical dilemmas can be solved.

## Life Long Learning

So far, after further refining proficiency in HTML and CSS, the group members are each far more adept at coding and building individual pages for the website. On top of that, it is found that mastery of Firebase is necessary in order to manage and access the database of users. Aside from that, learning Bootstrap has also helped in designing the website itself. However, it has been identified that more skills involving creative design need to be acquired. This skill is imperative to be able to create a website that is attractive, intuitive and also organized. Therefore, it may be necessary to contact and learn from professionals or sources that are more well versed in creative arts rather just technical design of a website. In terms of backend design, mathematical and coding knowledge on building a system that can sort, manage and handle bids and orders must be refined once the project reaches that state.

## Recent Progress

Since the last progress report, a lot of changes have been made. Firstly, all the required pages are now working independently and the login page now has a signup form available with the option of logging in using a social media account. Also, the catalogue page has the sku codes sorted by category. Lastly, the bidding page now includes the layout setup for easy bidding and the bidding history page is setup, so once the backend is setup, it can receive data from the active bid page. The original plan was to have a draft of the webpages ready and linked together to be hosted on a site. Then, have the client side ready for field testing by the end of this month and start to get familiarized with Node.js. However, after our recent meeting with our advisors, we agreed that the frontend needs more work and that we should take a break from adding functionality. While we were focused on getting a minimum viable product of the whole application quickly working, it is true that if our end-users end up not liking the look and feel of it from the get go, it could lead them to lose interest in the project. It was also suggested to look into creating a test suite as it could pay dividends in development time. To that end, we'll start using Selenium to test any new iterations of our UI for routine interactions.

## Future Plans

For the next progress report, considering the feedback we got from our advisors, we are going to put more emphasis on polishing the UI of the website and setting up a test suite through Selenium and Mockito to ease development of future iterations. We will also allocate some time for preparing the powerpoint slides required for our presentation. Specifically, by November 5<sup>th</sup>, we should have finalized the Bootstrap backbone of our website and look into integrating React with Bootstrap while also getting familiar with the Mockito and Selenium testing frameworks. By November 12<sup>th</sup>, we should have finished integrating React into our codebase and start working on test cases mocking a routine usage of the application. By November 15<sup>th</sup>, we should have a first draft of the powerpoint slides of our presentation ready and by November 21<sup>st</sup>, we should have completed the test suite started the week prior.