

# JKLM Resales BUSINESS CASE

SUBMITTED TO	CPSC 2350	SUBMITTED BY	<u>JKLM-R-esales</u>
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## REASON FOR THE PROJECT

Most popular e-commerce websites are currently deficient in the areas of data visualization and product tracking. Many sought after features such as price history, trends, price drop alerts, and detailed product specs are non-existent. With many users resorting to third party websites or browser extensions to meet their needs. We believe that our website can improve on these deficiencies and combine a range of services into one succinctly presented platform.

Our project intends to provide all the benefits of a normal e-commerce site. Such as a product search bar, shopping cart, checkout, etc. While additionally providing the functionality described in the first paragraph. Ex. price history. These added features will give our platform an edge by combining the e-commerce space with the review/affiliate marketing space, cutting out the middleman. Many consumers are simply looking for reassurance before taking the final steps to purchase a product, and we want them to get that reassurance from our own platform.

This project will be built mainly with HTML, CSS, JS, and an open source products API. As well as some open source JS libraries to aid in creating the functionality that we want.

## OPTIONS

This project has a few different options available to achieve the results that we desire. First of all we are interested in creating a number of graphs and visualizations for our products. To achieve this we have several options, such as creating our own javascript graphs using canvas, using an open source JS library such as chart.js, or creating static image graphs ahead of time.

Secondly our website will be composed of a number of pages that we could choose to construct in a variety of ways. One method would involve completely building our project from scratch, including the specifics of our design, theme, and color. Another method could utilize pre-built libraries such as bootstrap to aid us in the construction of things like nav bars and form elements that ordinarily take some additional time. Or we could use a mixture of the two as well as online style guides and design templates to simplify the process further.

## BENEFITS

The benefits of our website are the features we can provide to the user, using data from an api, the user has access to a lot more info than what you would usually get from a regular e-commerce site. With data visualizations of all of our products, such as presenting the historical prices and trends, the user can tell if they are saving money on a product and will also have an easier time deciding on what product would suit them the best. We will also provide reviews we can pull from amazon pages to show how other buyers enjoyed the product. Overall we are providing our users a platform that combines the entire shopping process into one cohesive package. Customers can do all of their product research on the same platform that they use to make purchases, which saves them both time and money, as they can make the right choice the first time.

## COSTS

Assuming we are each paid minimum wage, and dividing the tasks and such with each member equally. We can assume that we will each work around an hour to an hour and a half, until the final submission day.

- 70 days (sept 24 – dec 7)
- 4 members (Jeremie, Kyle, Lucas, Mark)

\$15.65 (minimum wage)

$4 \times \$15.65 = \$62.6$  a day +/- \$7.8

$\$62.6 \times 70 = \$4382$

+/-  $(70 \times \$7.8 = \$546$  for extra 30 mins a day for 70 days per person) =  $\$4382 - \$4928$  for developing the website assuming no problems occur

Let us say each problem would take an additional 2 hours to fix, this would be around \$31 in additional costs

## RISKS

Using the 3 risks categories of Sutherland we assess:

**Financial-** The financial resources of the project are extremely limited, so any changes in prices due to economic fluctuation would deeply affect the budget, preparing for that scenario the wages of the members were fitted with precision to allow for extra income in case of need. The impact would be medium (3) and the probability is medium-low (2) because of the timeline of the project.

**Business-** For business risks we can assess that competition with larger brands is always dangerous since our resources are a lot smaller and we could be easily outmaneuvered by a bigger and more experienced team making a better web-service in a smaller time frame. The impact would be high (5)but the probability is low (1)

**Technical-** The biggest technical risk is the API implementation since of all 4 members only one has experience with that kind of task. The impact would be medium-high (4) and the probability medium (3).

## SCHEDULE

The project is scheduled to be done in 13 weeks, from September 9 to November 26 with an extra foreseen maintenance period from September 9 to December 3. Each week is going to correspond to an Agile sprint with deliveries roughly each 2 weeks. Weekly meetings are scheduled on Saturdays from 12:30 to 1:30 PM.

-Week 01 (sept. 9- sept. 16): Hiring process, candidates evaluations.

-Week 02 (sept.16 - sept. 23): Assignment of roles and brainstorming of themes that match the project.

**Deliverable:** Roles document.

-Week 03 (sept. 23 - sept. 30): Placeholder "under construction" page, brief project description, gitHub for the project, Software Process discussion and decision.

-Week 04 (sept. 30 - oct. 7): Business case for the project.

**Deliverables:** README.md file for the GitHub, gitignore file for Git, basic html and css files with the pages created, document with software process discussion and decision, and business case document.

-Week 05 (oct. 7 - oct. 14 ): Design the website, debate the requirements.

-Week 06 ( oct. 14 - oct. 21): Prototype for the website.

**Deliverables:** Sitemap and prototype with placeholder for the features.

-Week 07 (oct. 21 - oct. 28): Designing components for the features, presentation preparation.

**Deliverables:** Presentation slides, prototype files.

-Week 07 (oct. 28 - oct. 29): "Products" feature designing (Feature 1), implementing feedback from prototype.

-Week 08(oct. 29 - nov. 4): Feature 1 implementation, Shopping cart feature designing (Feature 2).

**Deliverables:** website files with 1 working feature.

-Week 09 (nov. 4 - nov. 11): Feature 1 testing, feature 2 implementation.

-Week 10 (nov. 11 - nov. 18): Feature3 (data visualization) design, feature 2 testing

**Deliverables:** 2 working basic feature

-Week 11(nov. 18 - nov. 25): Feature 3 implementing, feature 3 testing

-Week 12 (nov. 25 - nov. 26): end to end testing of the entire project

**Deliverables:** Final delivery of the entire project with all the GitHub files and the entire webpage, presentation on the project.

-Week 12 (nov. 26 - dec. 03):

**Deliverables:** Final report document.

## ASSESSMENT

The costs for not doing the project is that we lose a significant number of marks and in doing so lower our GPA. We simply cannot afford to not do this project if we want to pass this class with a good mark. We would also be losing out on all of the real world experiences that this project provides. The things we learn during this project will undoubtedly aid us in our future classes and working lives, so not doing it would be a big negative for our future careers as developers. Along with that, customers would be missing out on the great features our website will bring to the table. You won't have to spend countless hours trying to determine where you will be able to save the most money and instead all you have to do is use our site and all the information is there.

## RECOMMENDATION

We believe that this project will be a success because it merges the already popular functionalities of two separate industries (E-commerce and Review/Data Display). We take the positive aspects of both industries and combine them to create a website that you don't have to leave during your search for the right product. Our intuitive UI and breadth of features will create the best possible user experience for our customers, and it will help them to find the products that suit their needs quickly and easily. We