Thriftara

Clothing Thrifting Website similar to eBay and Craigslist

CISC 4900 Spring 2023

Group Members:

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Technical Supervisor

Supervisor Responsibilities: Providing occasional feedback(monthly) with evaluation on group performance given to instructors on 4/7 and 5/10.

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Abstract

This project is meant to create a website for users to sell and buy used and no longer wanted items, similar to websites like eBay, Craigslist, Grailed, etc. Items can range from clothes to technology that is in good condition and reusable. But, unlike existing thrifting websites, we want to create a site centered around the user experience. This includes a better UI and item recommendations based on user preferences.

Changelog

1/27/23 - Project Idea Creation: Decided on the project to work on including elements and programs needed. We also worked on a timeline/deadline to follow for the semester and made edits to the project report.

1/30/23 - Completed Project Proposal

2/3/23 - Create a layout for the website, this includes all webpages and elements on each page. Group also started working on wireframes.

2/11/23 - Completed wireframes and made a prototype and database for the website. We also decided on the applications we'll use for the website.

Project Details

Why - Instead of throwing away perfectly good items, users can sell the items to other individuals who are looking for those exact items to make a profit. By facilitating trade between users, we can also contribute to limiting waste and in turn, save the environment.

What - Once consumers make an account, they are able to navigate the site, shop, and/or upload items for sale. This is a similar concept to eBay.

Who - Our target demographic are those looking to purchase second-hand items for a cheaper price.

Where - Our Project will be hosted online, where users around the world would have access to it.

How - Our website will use a format similar to every other shopping site to retain muscle memory for simple navigation. Where users will be able to add items they'd like to purchase to their cart and checkout the items.

When - The project is done when all the features, including the sign-in page, login page, payment page, upload page, etc, are up and running. Then, it'll be hosted online for users to access.

Technical overview of the project

We will create a website by using the React library for the front end and we're currently undecided about the application we'll use for the back end. It will either be with Tomcat which uses java or Node.js which uses JavaScript, with a corresponding database such as Mysql to keep track of user information. To improve the UI of our website, we're going to follow Schneiderman's Eight golden Rules while also building upon ideas from preexisting web pages. To create better item recommendations for users, we're hoping to create a personalized homepage for users depending on their interests when signing up for the Thriftara.

Experience

William - has experience with Html, CSS, Javascript, and java. With limited experience with bootstrap, and PostgreSQL.

Meggie - has limited prior experience using react, bootstrap, ExpressJS, and creating REST APIs.

Michael - has experience with Html/CSS, Javascript, PostgreSQL, and limited experience with Springboot and creating REST APIs

Chaocheng - has experience with Html, CSS, javascript, java, Mysql, Maven, Mybatis, and Spring.

Project Objectives and Expected Outcomes

Objectives:

Allow the user to create a profile/account

Allow the user to upload items for sale

Allow the user to search for items(Search Bar and Search Page)

Allow the user to add and remove items in the cart

Allow users to purchase items from the cart

Create a front page for the user to view

Allow users to follow social media of the website

Allow the users to choose a delivery method

Create a logo for the website

Expected Outcomes:

Get users to be impressed by websites front page

Get users to sell items with a percentage going to website

Get users to buy items

Get users to follow websites social media

The users can easily navigate the website

The user can easily find the item they're looking for.

Software and Hardware Technology Requirements

Software Requirements For The First Draft:
- Visual Studio/React (Creating website)
- Github (Code Repository)
- MySQL (Database)
- Mybatis (JDBC framework)
- Chrome
- Google Drive(Docs)
- Marvel Prototype
- Removed Node.js

Hardware Requirements:
- Computer
- Internet

Changes Made(TBD):
- Added Marvel Prototype
- Removed Tomcat/AWS (Hosting Webpage)

Software Construction

We'll upload changes made during the coding process onto GitHub to keep track of commits made by different group members. For the project, we'll also follow the iterative design model, with around 3 cycles of improvement.

React Routing Website

Milestones and Reporting

Task	Progress
Project Report	Done
Wireframe	Done
Database Design	Done
Prototype	Done
Barebones Website	Working on it
Connect Database to website	

Webpage Checklist

Date	Group Member	Webpage	Completion
3/8/2023	William	Sellpage	In-Progress
2/17/2023	Meggie	Homepage, Navbar, and footer	Completed
2/17/2023	Michael	Searchpage	In-progress
2/27/2023	William	Login and Signup page	Completed
2/10/2023	William	About and Contact page	Completed
3/7/2023	Meggie	Shopping Cart page	In-progress
3/3/2023	Meggie	Brands page	Completed

Project Management

The project will be managed by a check-in/works distribution system where a task will be assigned to a given group member with a deadline as to when it has to be completed. For the project, we also decided on checking in with our supervisors once every month to update them on the changes we've made and to further guidance with evaluations on 4/7 and 5/10.

Estimated Timeline and Tasks

Dates	Tasks to Complete

1/25-1/31	Gain a firm understanding of what the project will be about.
1/31-2/14	Create a wireframe, storyboard, database, and general architecture of the website. Update the supervisor on our progress and for any guidance.
2/14-2/28	Create a prototype of the website. Update the supervisor on our progress and for any guidance.
2/28-3/24	Learn more about the programs/software we'll use for the project and create a barebones website. Update the supervisor on our progress and for any guidance.
4/7	Ask for an evaluation from the supervisor.
3/24-4/18	Work on implementing the back end of the website.
5/10	Ask for an evaluation from the supervisor.
4/18-5/16	Make improvements to the website based on feedback from the supervisor and any quality-of-life changes we think of.

Note: A form will be created in the future for project feedback.

Group Member Responsibilities

Date	Group Members	Duration	Role	Description
1/25/23	William, Chaochen	1 Hour	Other	Attend the orientation
1/26/23	Meggie, Michael	1 Hour	Other	Attended orientation
1/26/23	All	2 Hour	Other	Project Idea Research
1/27/23	All	4 Hours	Documentation	Create a project idea and work on project report
1/29/23	All	2 Hours	Documentation	Complete Project Proposal
2/3/23	All	4 Hours	Documentation	Create webpage layout, find wireframe creation website, and started creating wireframes.
Before 2/10/23	William	TBD	Documentation	Complete wireframes for navigation page, add a navigation bar and footer to all the pages

Before 2/10/23	Chaochen	TBD	Documentation	Complete wireframes for shopping cart page
Before 2/10/23	Michael	TBD	Documentation	Complete wireframes for sell page, list of brands page
Before 2/10/23	Meggie	TBD	Documentation	Complete wireframes for search page
2/10/23	All	4 Hours	Documentation	Completed all wireframes and finished the prototype. Create the database.
2/17/23	William	TBD	Programming	Create a logo and complete sell page
2/17/23	Meggie	TBD	Programming	Create navigation page
2/17/23	Michael	TBD	Programming	Create search page
2/17/23	Chaochen	TBD	Programming	Work on back-end design and implementation

Actual Timeline

Date	Group Members	Duration	Role	Description
1/25/23	All	1 Hour	Other	Reviewed the syllabus and got an overview of how the course will be conducted.
1/26/23	All	2 Hour	Other	Project Idea Research
1/26/23	William	2 Hour	Documentation	Created a plan for what needs to be discussed during the meeting. I also created a group chat, docs, and GitHub.
1/27/23	All	6 Hours	Documentation	Discuss what the project will be, while also working on the project report and project logs.
1/27/23	William	2 Hour	Documentation	Cleaned up project report and sent emails to possible supervisors.
1/29/23	William	3 Hours	Documentation	Revised project report, by making goals clearer and improving grammar.
1/30/23	All	4 Hours	Documentation	Completed Project Proposal

2/3/23	All	4 Hours	Documentation	Created webpage layout, figured out an application to use for wireframes, and started working on wireframes.
2/7/23	William	3 Hours	Documentation	Completed homepage wireframe, fixed up other wireframes, and prepared for what needed to be completed for 2/10.
2/10/23	All	20 minutes	Other	Met up and checked in with supervisor
2/10/23	All	4 Hours	Documentation	Completed all wireframes and finished the prototype. Create the database. All decided on which applications to use for the website.
2/14/23	William	4 Hours	Research and Creation	Figure out how MySQL worked, created a database for the project, and fixed up the entity relationship diagram.
2/15/23	William	2 Hours	Research	Research on full-stack development and deployment to figure out how to delegate work.
2/17/23	All	2 Hours	Documentation	Discussed the programs were gonna use, and how it's going to be implemented. Also, we delegated work to each group member to work on.
2/17/23	William	30 Mins	Documentation	Created some logos
2/20/23-2/22/23	William	6 Hours	Research	Learning React
2/22/23	William	5 Hours	Implementation and Error Handling	Started working on the About page and worked on linking it together.
2/24/23	All	1 Hour	Other	Group meetings on progress, issues, and discussed further steps.
2/24/23	William	30 Mins	Documentation	Figured out how to version control and upload the logo with transparency.
2/27/23	William	3 Hours	Implementation	Finished the about page, struggled a bit with linking and image sizing so it took a bit.
2/27/23	William	1 Hours	Implementation	Learned and implemented CSS module

				to give every component a unique style.
2/27/23	William	2 Hours	Implementation	Completed contacts page.
3/1/23	William	5 Hours	Implementation	Created Signin page, took a while cause I wanted an animation for clicking on enter email, but it required jquery import which can mess up the way react formats the DOM, so I kept it simple.
3/1/23	William	1 Hours 30 Min	Implementation	Tried to figure out how to combine bootstrap CSS with react modules, but it didn't work. Found custom bootstrap classes.
3/3/23	All	2 Hours	Documentation	Meet with supervisor to describe the progress we've made and the steps we'll take going forward. Also, shared our web pages and ideas with each other.
3/6/23	William	6 Hours	Implementation	Created the signup page and is trying to figure out how to validate and change DOM elements using react refs. Also did some research on arrow functions and states.
3/7/23	William	1 Hour	Implementation	Trying to figure out how to stop form wiping when the password doesn't match.
3/8/23	William	1 Hour 30 Min	Implementation	Worked on the sell page and create the option to change between different states. I just need to create the individual components now and display the required component base on the button clicked.
3/8/23	William	2 Hour	Research	Learning more about react hooks and more specifically how to use "useState" and how to create elements. Link to create https://stackoverflow.com/questions/72285009/how-to-remove-object-from-array-based-on-id-in-react Link to delete=https://www.youtube.com/watch?v=jWWW9Wyl0mY&t=21s&ab_channel=Devtamin

3/8/23	William	1 Hours	Documentation	Described each member's progress and the steps forward, like the functions we still need. Going to start working on combining the front end with the back end next week.
3/14/23	William	2 Hours	Research	Trying to figure out how to use Axios to connect react with spring boot (REST API). Simple Example: https://www.javaguides.net/2020/08/react-js-axios-example.html
3/15/23	William	1 Hours	Merge Repo	Merge repositories and fixed some conflicts, require further input from team members to fully merge everything because of the use of bootstrap.

Webpage Layout

Note: Numbers represent the order of importance. Navigation Bar and Footer will appear on all pages.

Home page(1):
- Navigation Bar
    - Search Bar
    - Login/Signup(replace with username after they log in)
    - Logo
    - Start selling
    - Cart button
    - Columns
        - Brands
            - Nike
            - Supreme
            - Prada
            - Gucci
        - Menswear
            - Tops
            - Bottoms
            - Outerwear
            - Footwear
            - Accessories
        - Womenswear
            - Tops
            - Bottoms
            - Outerwear
            - Footwear
            - Accessories
        - About

- Body
  - Slideshow
  - Brand Selection
  - Menswear Selection
  - Womenswear Selection
  - Recommended Items
  - Extra: What the user recently looked at.
  - Extra: List items under $50, $100, and $200.
- Footer
  - Logo
  - Social Links
  - Contact information for customer support
  - FAQ
  - Subscribe to the newsletter

Login page(2):
- Email/Username
- Password
- Signup

Signup page(3):
- Username
- Email
- Password
- Password Confirmation

About(8):
- History about the company
- Founders
- Slogan
- Purpose

Contacts(customer support)(7):
- Emails
- Phone numbers
- Operation hours

Search Page(6):
- Side Bar
  - Department
    - Menswear
      - Tops
      - Bottoms
      - Outerwear
      - Footwear
      - Accessories
    - Womenswear
      - Tops
      - Bottoms
      - Outerwear

- Footwear
- Accessories
- Price Range
  - Min Price
  - Max Price
- Size
  - S
  - M
  - L
  - XL
- Brand
  - Nike
  - Supreme
  - Prada
  - Gucci
- Condition
  - New
  - Like New
  - Very good
  - Good
  - Fair
- Shipping Option
  - Local
  - Delivery
- Sort by
- Listings
  - Row for the number of listings
- Back and forward arrows to navigate between listing

Sell page(4):
- Upload items
- Set price
- Sales profile
  - Selling
  - Sold

Shopping Cart page(5):
- Remove items
- Items in cart
- Checkout button
- Total Cost
- Price of each item

Extra: Profile Page
Extra: Check out page
Extra: Menswear and Womenswear pages
Extra: Brand pages
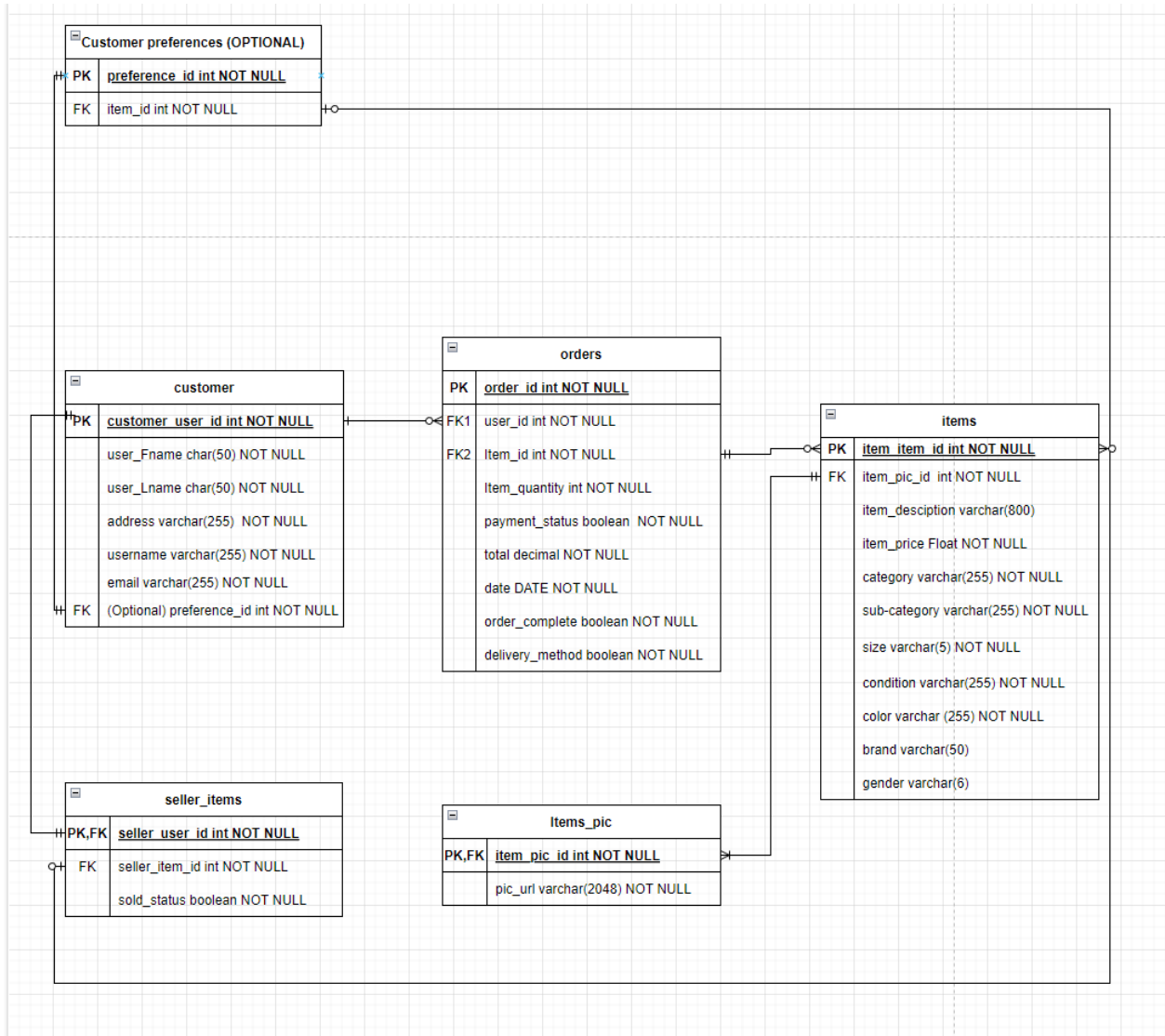- Brand logos will link to their selection of products.

- Extra: Sort companies

Extra: Shipping Page/Return Page

Wireframe and Prototype

The wireframes and prototype can be accessed with the link below:
https://marvelapp.com/prototype/2i390356

Database

Url Version:

https://drive.google.com/file/d/1S4gUuh7REqWuRf-yPFrfbdVGlAO7MD0E/view?usp=sharing

Additional Project Documents

Project Ideas:

https://docs.google.com/document/d/1n48ZPAC9kuGrmYLo0t_VQQGLkQ9wWTOuU0yUhxoa
Lm8/edit?usp=sharing

Github:

https://github.com/William321012/Thriftara

Database Design:

https://app.diagrams.net/?src=about#G1S4gUuh7REqWuRf-yPFrfbdVGlAO7MD0E

Member Background

William Lin(Computer Science Major with Multimedia Computing Minor): I'm interested in front-end development and have created simple web pages using Html, CSS, and JavaScript. I also have some experience using other programs like NetLogo, Processing, Clickteam fusion, and more.

Meggie Cheng (Multimedia Computing Major): I am interested in frontend/web development and game development. I have some experience creating simple websites with React and bootstrap and games with Unity.

Michael Newman (Computer science Major with Physics minor): Im interested in full-stack web dev and using/managing data in general. I have some experience creating simple websites and creating a CRUD API with java/Springboot.

Chaocheng Zhu(Computer Science Major): I am interested in Java full-stack development. I have some experience developing a website that includes CRUD, transaction, and JDBC with java.