

TURBODEGA



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ECSE 456 - DESIGN PROJECT 03



TURBODEGA

PROBLEM STATEMENT

Small grocery stores in Latin America have experienced losses in sales and profit margins due to the growth of supermarkets, self-serve shops and convenience stores [1].

2 factors that lead to this issue:



COMPETITIVE PRICES

Grocery Stores

Order in smaller quantities

Pay higher price to the distributors for the goods they purchase

Grocery Stores

Have a limited pool of distributors

Distributors don't have to compete as much

Distributors

Need to sell at higher price for those who order in smaller quantities

Have a limited pool of small grocery stores to reach

GAPS IN RETAIL LOGISTICS

Grocery Stores

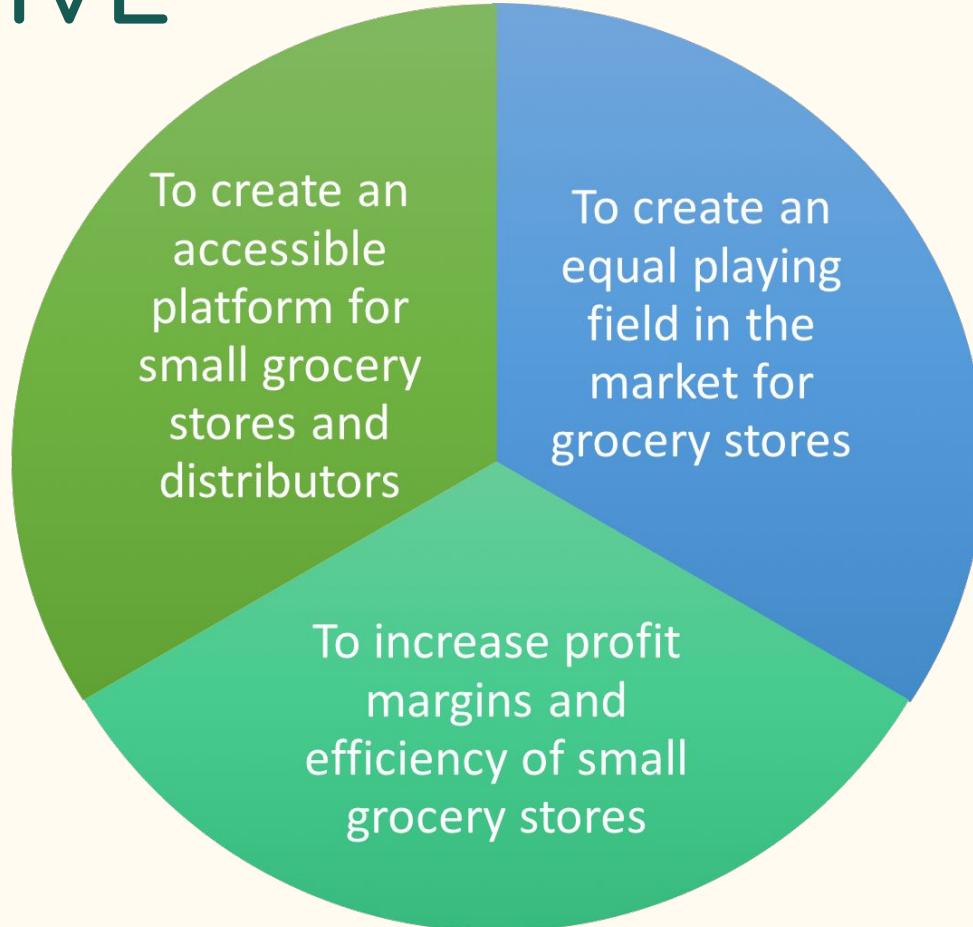
- Order when out of stock
- Do not regularly update their inventory list

Distributors

- Hard to track small orders from multiple stores

OBJECTIVE

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STAGE 1

- Place order when needed
- The other team is designing the mobile app for this

Grocery Stores

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- Sort orders according to their category and location of the grocery store
- Send notifications to distributors regarding orders made

- Receive orders from Turbodega
- No information about grocery stores that placed an order
- Place their best price for an order within 48 hours of receiving it

Distributors



STAGE 2

- Place the best price that they can offer
- The lowest bidder will get a notification and will be expected to deliver the goods to Turbodega warehouse

Distributors

Turbodega

- Distribute the goods to the respective small grocery stores
- Receive their orders at a price lower than they used to pay within a week

Grocery Stores

- Receive their orders at a price lower than they used to pay within a week

THE WEBSITE

Version 1

HOME ABOUT SERVICES

WELCOME

Connect. Learn. Grow.

The starting point for a better business.



TURBODEGA

TURBODEGA

Version 2



TURBODEGA

Welcome to Turbodega

CATALOGUE



You can keep track of your inventory list and distribute them according to the quantity and types of products you have in your inventory.

[Learn More](#)

AUCTION



You can sell your products at the best selling price when you receive notification on active bids based on your inventory.

[Learn More](#)

DELIVERY



If your products are sold at the best selling price amongst other distributors, you can deliver your products to us and we will take care of the rest!

FLOW OF THE WEBSITE

TURBODEGA

Landing Page

Turbodega

About Contact Login

TURBODEGA

Welcome to Turbodega

CATALOGUE

AUCTION

DELIVERY

You can keep track of your inventory list and distribute them according to the quantity and types of products you have in your inventory.

You can sell your products at the best selling price when you receive notification on active bids based on your inventory.

If your products are sold at the best selling price amongst other distributors, you can deliver your products to us and we will take care of the rest!

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About

Turbodega

About Contact Login

About Turbodega

Home / About

TURBODEGA

About Turbodega

Turbodega is here to help improve small-grocery stores' competitiveness in emerging countries through digitalization by bringing together microfinance institutions, product manufacturers and distributor partners in a single platform. It will allow small grocery retailers to improve their operation's efficiency by accessing more competitive product prices driven by order grouping, optimizing delivery and logistics and having better credit terms for product orders through risk pooling.

Our Team

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Our Customers

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LOGIN/REGISTRATION

Login

- Username and password
- Or sign in with social media account
- If doesn't own an account, click on Registration link

Registration

- Register using email or social media account
- Link to login page after successful registration

LOGIN

Username

Password

LOGIN

[Don't have an account? Register here!](#)

LOGIN WITH GOOGLE

LOGIN WITH FACEBOOK

REGISTER NOW!

Email Address

Username

Password

Confirm password

REGISTER

[Already have an account? Sign in here!](#)

REGISTER WITH GOOGLE

REGISTER WITH FACEBOOK

HOME PAGE

Home

- After successful login
- Get access to:
 - My Profile
 - My Account

The screenshot shows the Turbodega homepage with a dark header bar containing the brand name in white. Below the header is a large graphic featuring a smartphone with a shopping cart icon, set against a background of overlapping blue and green triangles. The word "TURBODEGA" is prominently displayed in large white letters across the center of the graphic. The main content area has a light orange background and contains three cards:

- CATALOGUE**: Shows a smartphone displaying a checklist or inventory list. Text below reads: "You can keep track of your inventory list and distribute them according to the quantity and types of products you have in your inventory."
- AUCTION**: Shows a green circle with the word "BID!" in white. Text below reads: "You can sell your products at the best selling price when you receive notification on active bids based on your inventory."
- DELIVERY**: Shows a green circle with a forklift icon. Text below reads: "If your products are sold at the best selling price amongst other distributors, you can deliver your products to us and we will take care of the rest!"

MY PROFILE

- Update about company information
- Contact information and address are important
 - Distributors will only be notified for bids within 20km of their radius

The screenshot shows a web page titled "TURBODEGA" at the top right. On the left, there's a teal sidebar with the heading "MY PROFILE". The main content area has a dark header bar with links: "About", "My Account", "My Profile", "FAQ", and "Logout". Below this, the page title is "Company Information". The form contains two required fields:

- "b. Legal Name of Owner*" (highlighted in red)
- "c. National Registration ID*" (highlighted in red)

At the bottom of the form, it says "0 of 7 answered". In the bottom right corner of the form area, there are three small icons: a green square with an upward arrow, a blue square with a downward arrow, and a red square with a rightward arrow. At the very bottom of the page, a dark footer bar contains the text "Copyright © Turbodega 2018".

MY ACCOUNT

Catalogue

- Distributors upload inventory
- Inventory lists will be sorted according to categories
- Distributors can delete or add more products as needed

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About My Account ▾ My Profile ▾ FAQ Logout

Catalogue

Search SKU Code...

[Drinks](#)

[Health Beauty & Pharmacy](#)

[Household Supplies](#)

[Pantry Food](#)



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MY ACCOUNT

Active Bids

- Distributors can only see the bids for products that are in their catalogues
- The active bids run for 48 hours
- Distributors can place their best price for the active bid period

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Turbodega

About My Account ▾ My Profile ▾ FAQ Logout

Active Bids

Home / Active Bids

Please choose the category of products you would wish to view the SKUs of.

Drinks

Product Name	SKU	Order Size	Closing At	Minimum Bid Price Per Unit	My Bid	Units Desired
Hellmanns May	7501005151962	20000	5:00 PM November 20	1.20 \$		
Ketchup	9249183094248	15000	5:00 PM November 21	0.90 \$		
Mustard	193824971928	10000	5:00 PM November 22	0.60 \$		
Relish	1384971398443	5000	5:00 PM November 23	0.45 \$		

Confirm bids

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MY ACCOUNT

Bid History

- Distributors can keep track on their pending, unsuccessful and successful bids here

Turbodega

About My Account ▾ My Profile ▾ FAQ Logout

Bidding History

[Home](#) / Bidding History

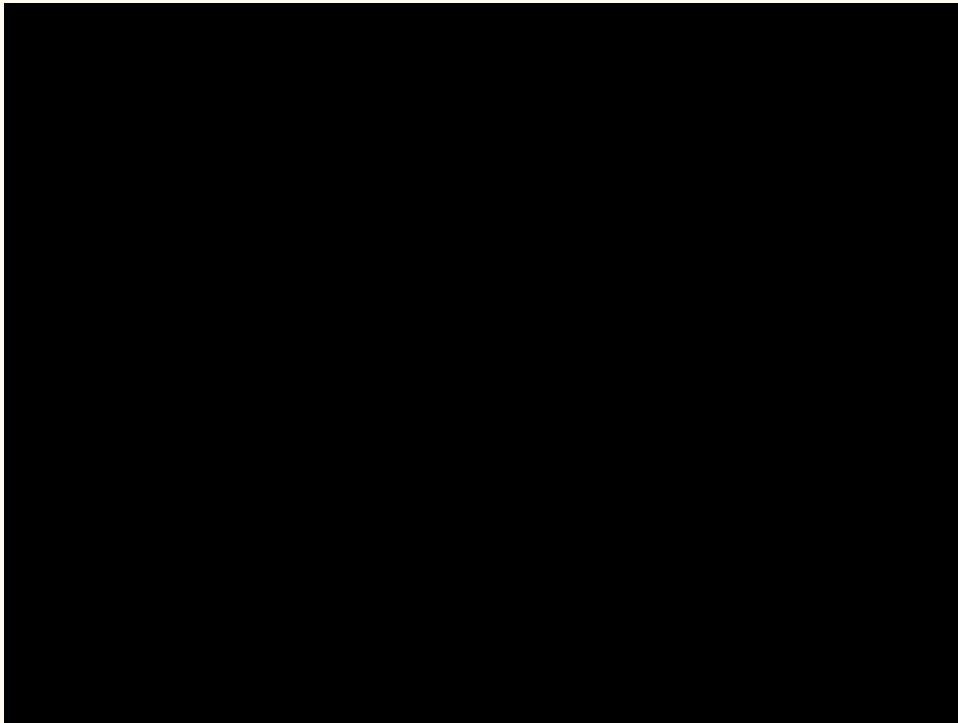
Pending Bids					
Item Name	SKU	Order Size (units)	Date Bid	My Bid (\$)	Bid Closing Date (\$)
Hellmanns May Real 12X390GR	7501005151962	20000	12 Nov 2018	26000	13 Nov 2018

[Successful Bids](#) +

[Unsuccessful Bids](#) +

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DEMO VIDEO



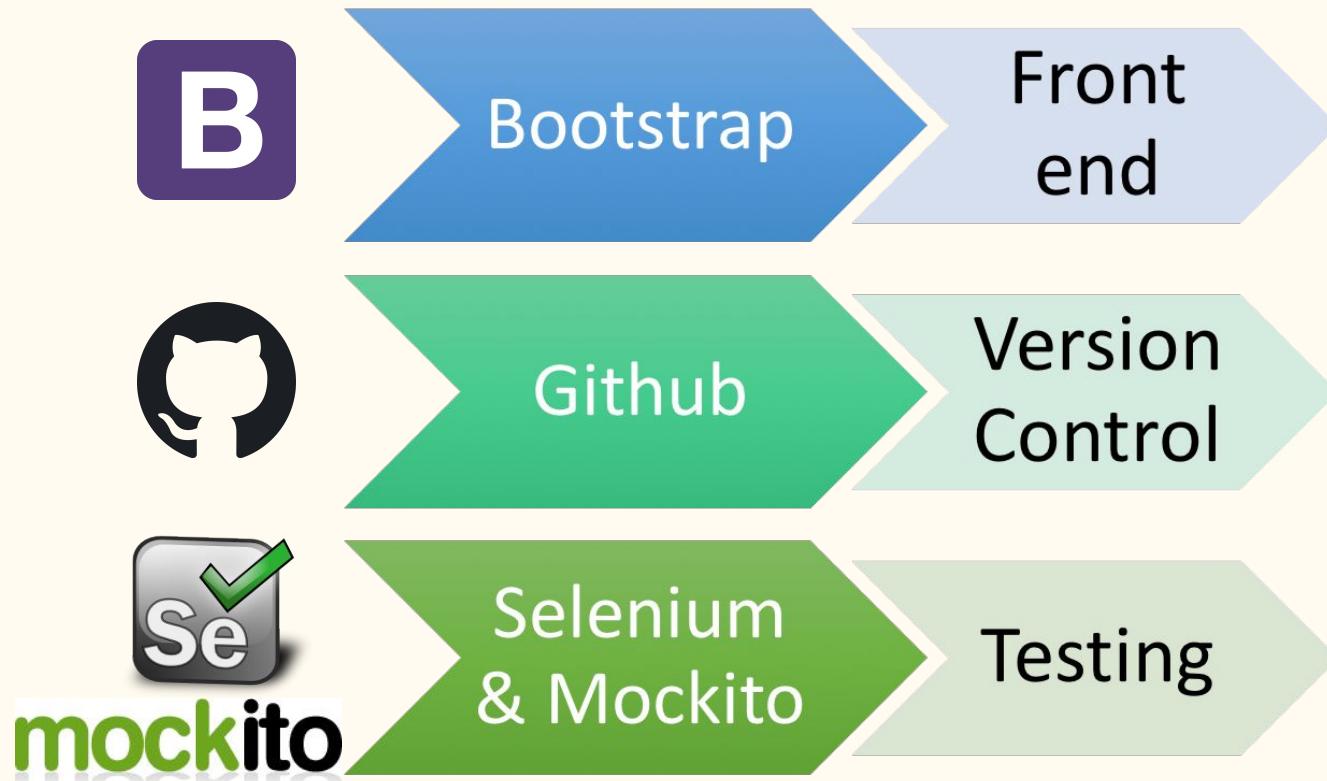
TURBODEGA

ARCHITECTURE

WEBPAGES	Login	Catalogue	Active Bids	Bid History
PRESENTATION TIER	Registration	Build user-specific catalogue	Display available bids	Display user bidding history
LOGICAL TIER	Compare user credentials to verify identity	Retrieve product information, store user inventory	Fetch available bids, sort available bids by volume/price	Retrieve user bidding information
DATA TIER	Database			

TECHNOLOGICAL OVERVIEW

TECHNOLOGY USED



PROJECT MANAGEMENT

Meeting with the
customers weekly

Distribute the tasks
according to
capability

One webpage
per person

Improve the look
and functionality
of the website
weekly

WORK BREAKDOWN

Summary of what each person did for this semester

Yahya Azami

- Building the active bids page of the website
- Responsible for various sections of the progress reports
- Responsible for setting up the test environment

Aliah Mohd Nazarudin

- Created the overall website layout and theme
- Responsible for the registration and login page of the website
- Responsible for various sections of the progress reports and presentation slides

Nabil Ersyad

Noor Eddie Putera

- Responsible for various sections of the progress reports
- Responsible for the bidding history page

Thusha Sivapatharajah

- Created the initial landing/home page with other general pages that links to the landing page
- Responsible for various sections of the progress reports
- Responsible for the catalogue page of the website

MAIN CHALLENGES AND CONSTRAINTS

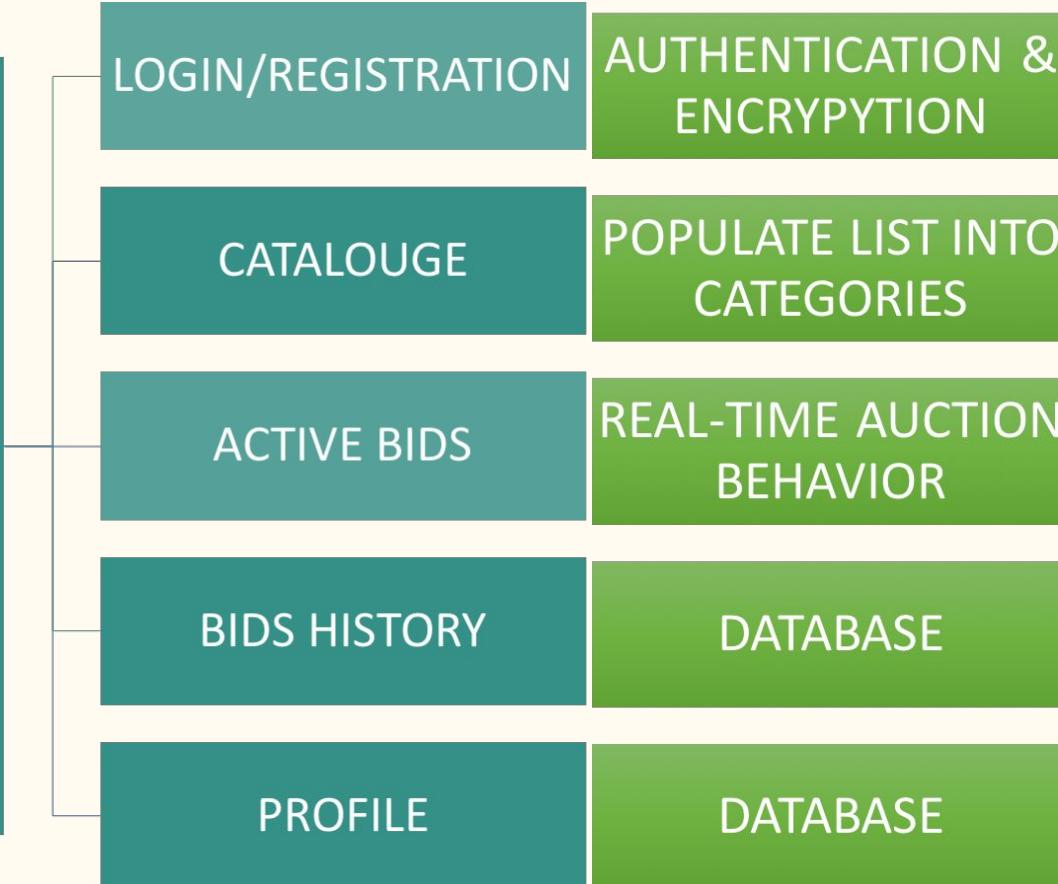




WHAT'S NEXT?

WORK PLAN & TECHNOLOGY

BACKEND & TESTING



TURBODEGA

BACKEND



TESTING



mockito

WORK BREAKDOWN

Summary of what each person will do for the next semester

Yahya Azami

- Getting familiar with Node.js
- QA using Mockito/Selenium
- Build the backend of the active bids page

Aliah Mohd Nazarudin

- Getting familiar with Node.js
- Build the backend of the login and registration page
- Figure out the authentication and cryptography for login page

Nabil Ersyad

Noor Eddie Putera

- Getting familiar with Node.js
- Build the backend for bidding history
- Figure out a way to keep track of history without overwhelming servers

Thusha Sivapatharajah

- Getting familiar with Node.js
- Build the backend of the catalogue page
- Get familiar with testing tools like Mockito/Selenium