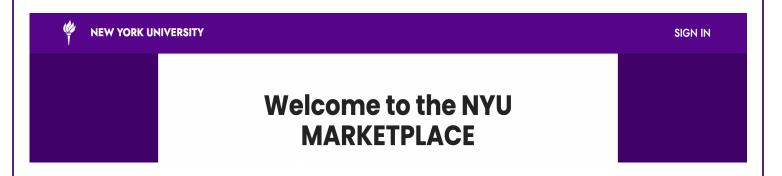
# PROJECT REPORT

CS-GY 9223 CLOUD COMPUTING FALL 2021

# NYU MARKETPLACE



Under the Guidance of DR. SAMBIT SAHU

BY:

NIKHIL KISHAN KHANEJA (nkk6190) ADVAIT NENE (pm3278) PRATEEK DESAI (arn8059)

# **CONTENTS:**

- PROJECT PROPOSAL
  - o PROJECT DESCRIPTION
  - o MOTIVATION
  - o FEATURES
  - o AWS SERVICES USED
- CLICKABLE PROTOTYPE
- ARCHITECTURE
- API's

# **PROJECT PROPOSAL:**

#### • PROJECT DESCRIPTION:

The idea is to build a marketplace for NYU students. The two roles that the user can take are that of a Buyer and a Seller. The buyer can login, search for the items to buy, and bid on the items on the bidding market. The seller can post the item and set a price or can put it on the bidding market (as his preference).

#### • MOTIVATION:

As fellow NYU students, when we were trying to move in and buy furniture or other items, we got postings and advertisements of items on sale from different sources, sometimes these items were even sold but the ads were still in circulation. There was not much information about the items and finally, the ads were posted on multiple platforms, ranging from WhatsApp to Google Sheets. We thought we would tackle this problem by building a unified platform for all NYU students as it would be easier for incoming students as well as the current students.

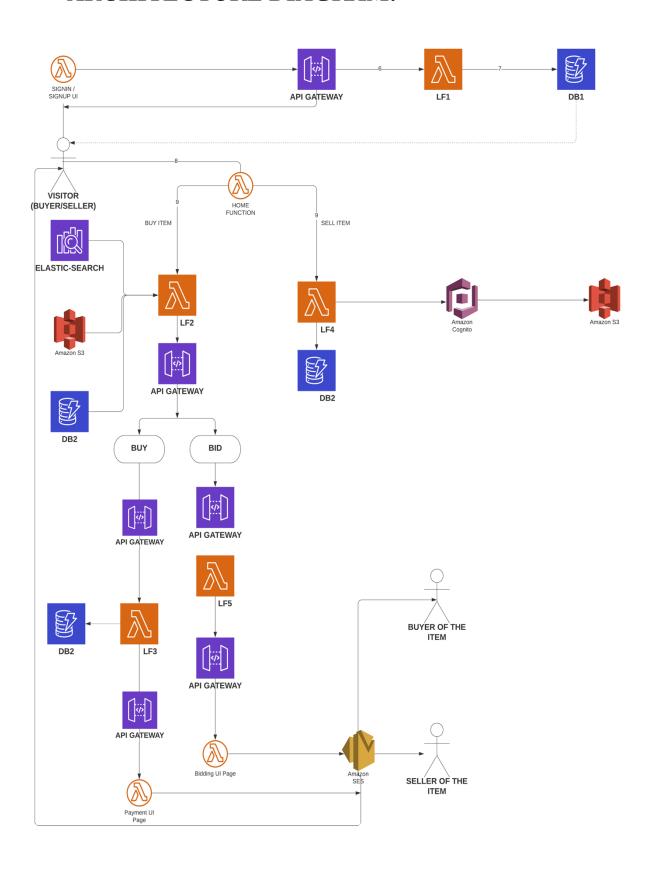
# • FEATURES:

The website will allow students to Buy Items, Sell Items, Bid on Items (provided the Seller has chosen this option), keep items in Cart, See history and previous orders.

#### • AWS SERVICES:

- o AWS S3
- o API Gateway
- o AWS Lambda
- o AWS SES
- o AWS DynamoDB
- o AWS Cognito

# • ARCHITECTURE DIAGRAM:



#### API DESIGN

#### /bid

- GET
  - o UI Screen for Biding

#### /buysideui

- GET
  - o UI Screen for Users view the products on NYU Marketplace

#### /getProductData

- GET
  - o Fetches the Data from DynamoDB and displays on UI Screen

#### /home

- GET
  - UI Screen for Users to provide options to users whether they want to sell the product or buy.

#### /payment

- POST
  - Posts the Data to SES to send conformation Email
  - Fields (Product\_ID, Product\_Name, Product\_Type, Product\_Desc)

#### /paymentui

- GET
  - o UI Screen for Users to make a payment for the bought product

#### /postProductData

- POST
  - Sends the product data entered by the seller into DynamoDB
  - Fields (Name, Product\_Type, Price, Product\_Desc, Email, Phone\_Number, Image\_URL, Bid\_Type [Yes/No], Bid\_Rate, Bid\_Expiry)

#### /sellsideui

- GET
  - o UI Screen for Users to post their products for sale up

# /signin

- POST
  - o Validates the User-ID and Password with the DynamoDB
  - o Fields (Email, Password)

# /signup

- POST
  - o Creates a new account for the user and add's the user's data in DB
  - o Fields (Emai, Name, Phone\_Number, Password)

#### /signupui

- GET
  - o UI Screen for Signin/Signup Functionality

# /updateBid

- POST
  - o Updates the Bid of the selected product.

#### • LINKS

#### **PROJECT PROTOTYPE:**

https://marvelapp.com/project/5933309/screen/83064685

#### **PROJECT DEMO VIDEO:**

https://youtu.be/we5SGlkk9Rw

#### **GITHUB REPO:**

https://github.com/nikhilkhaneja/NYU-MarketPlace

#### **PROJECT SLIDES:**

<a href="https://docs.google.com/presentation/d/1isDaPyFpA5S\_lvW">https://docs.google.com/presentation/d/1isDaPyFpA5S\_lvW</a>
<a href="mailto:S7prtn4uKTMpi7oXdlaHXetR3euI/edit#slide=id.p1">https://docs.google.com/presentation/d/1isDaPyFpA5S\_lvW</a>
<a href="mailto:S7prtn4uKTMpi7oXdlaHXetR3euI/edit#slide=id.p1">https://docs

#### **GOOGLE DOCS PROTOYPE LINK:**

<u>https://docs.google.com/document/d/1vXaLJyWrMVqArzW</u>
4zEk3PXwFXKOp7MQfy8RA7U9Am 4/edit