

# Stock Notifier

CS9223

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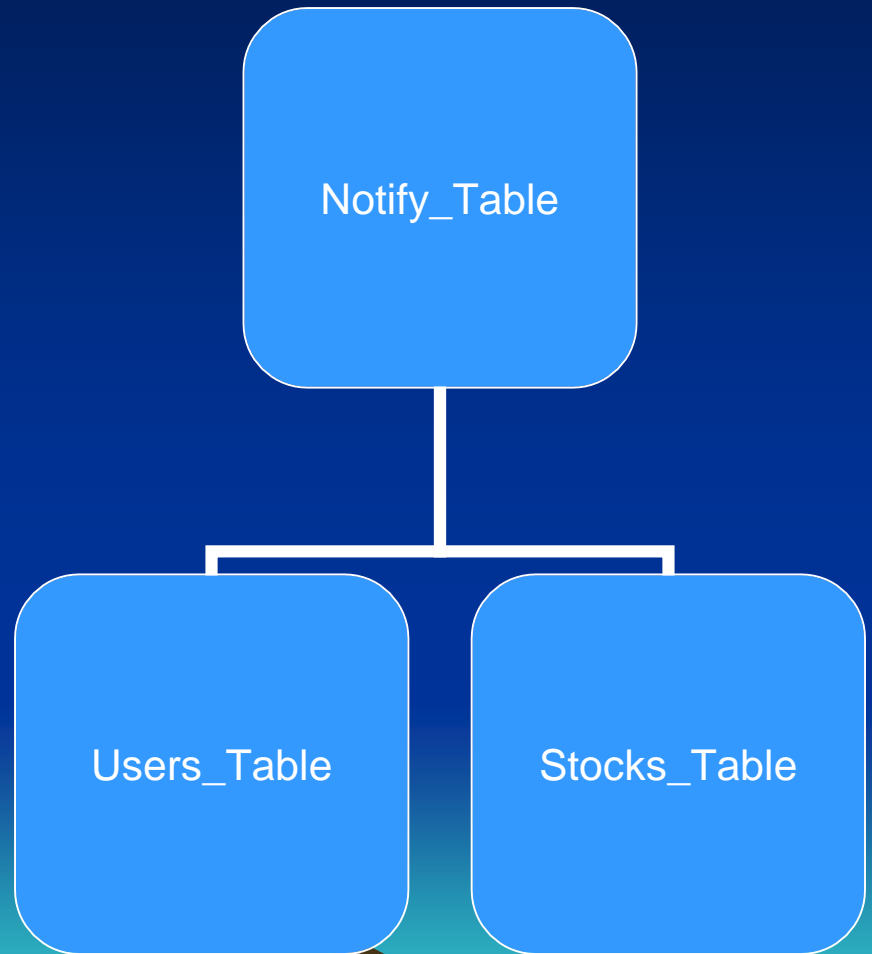
# Architecture

- Frontend-Web interface (AWS library)
  - Html/javascript
- Backend-Java process (AWS library)
  - javax.mail-Utilize [stock0notifier@gmail.com](mailto:stock0notifier@gmail.com)
    - SMTP/IMAP
  - Google REST API for stock prices
  - SQLite capable
- AWS Resources
  - SNS-Alternative to e-mail account
  - DynamoDB-alternative to SQLite
  - Running on EC2 instance
  - Cloud Search for searching stocks



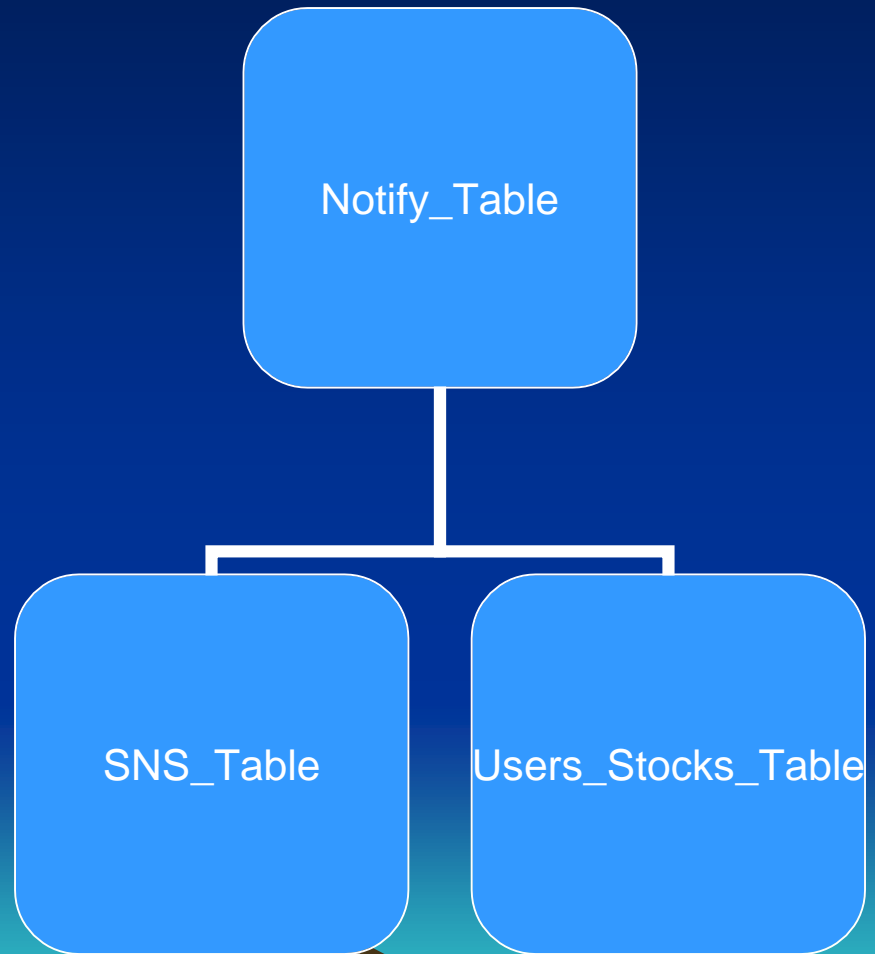
# DynamoDB Schema

- Users\_Table (id)
- Notify\_Table (notify\_id)
- Stock\_Table (symbol)
- SNS\_Table (email)
- Users\_Stocks\_Table (email)



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# Frontend Flow

## Automatic Stock Notification

Stock Search



Search By Stock Name, Symbol, Market or Industry!

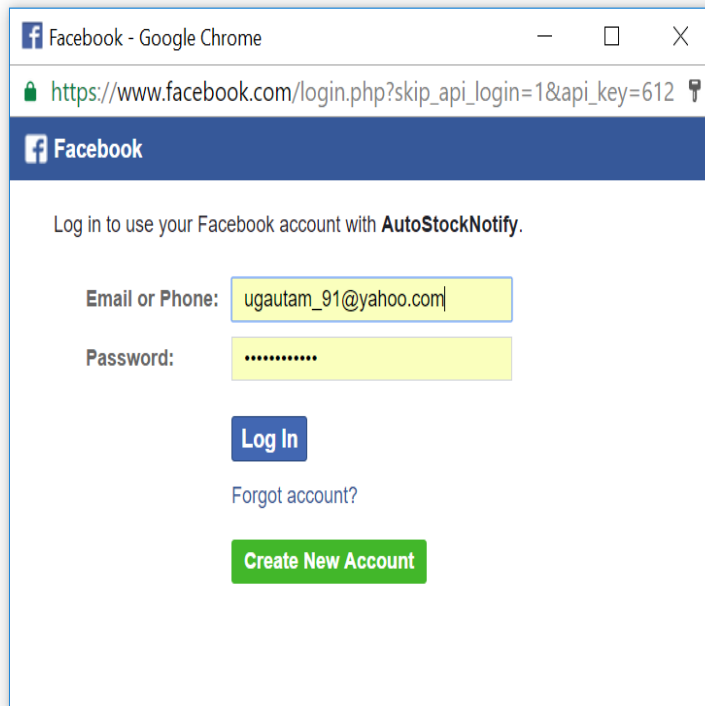
Search!



submit

# Frontend Flow

## Automatic Stock Notification



The screenshot shows a Google Chrome browser window with the Facebook login page. The address bar displays the URL: `https://www.facebook.com/login.php?skip_api_login=1&api_key=612`. The page header includes the Facebook logo and the text "Facebook". The main content area has the heading "Log in to use your Facebook account with **AutoStockNotify**." Below this, there are two input fields: "Email or Phone:" with the value "ugautam\_91@yahoo.com" and "Password:" with masked characters "\*\*\*\*\*". There are three buttons: a blue "Log In" button, a blue "Forgot account?" link, and a green "Create New Account" button.

Login with Facebook

## Automatic Stock Notification

User Name \*

ug277

Email \*

utkarsh.gautam@nyu.edu

Select Stock

AlphabetInc

Start Price\*

Stop Price\*

Login with Facebook

Submit

# Backend Flow

- General user can e-mail `stock0notifier@gmail.com`
  - Subject line: GETCONFIG
  - Subject line: UPDATE-<stock>-<start price>-<stop price>
  - Subject line: DELETE-<stock>
- Administrator can e-mail [stock0notifier@gmail.com](mailto:stock0notifier@gmail.com)
  - Subject line: CREATE-<username>-<email>
  - Subject line: DELETEUSER-<email>



# Front End Features

- Supports stock search using AWS Cloud Search
  - Search indexed on the following fields:
    - Name
    - Symbol
    - Industry
    - Market
- User Authentication using Web Federated Identity
  - Facebook login used
  - User authentication to allow posting to DynamoDB
- Posts user input information to DynamoDB

