HW#9 IOS Clues

CSCI571

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HW 9 Prototype
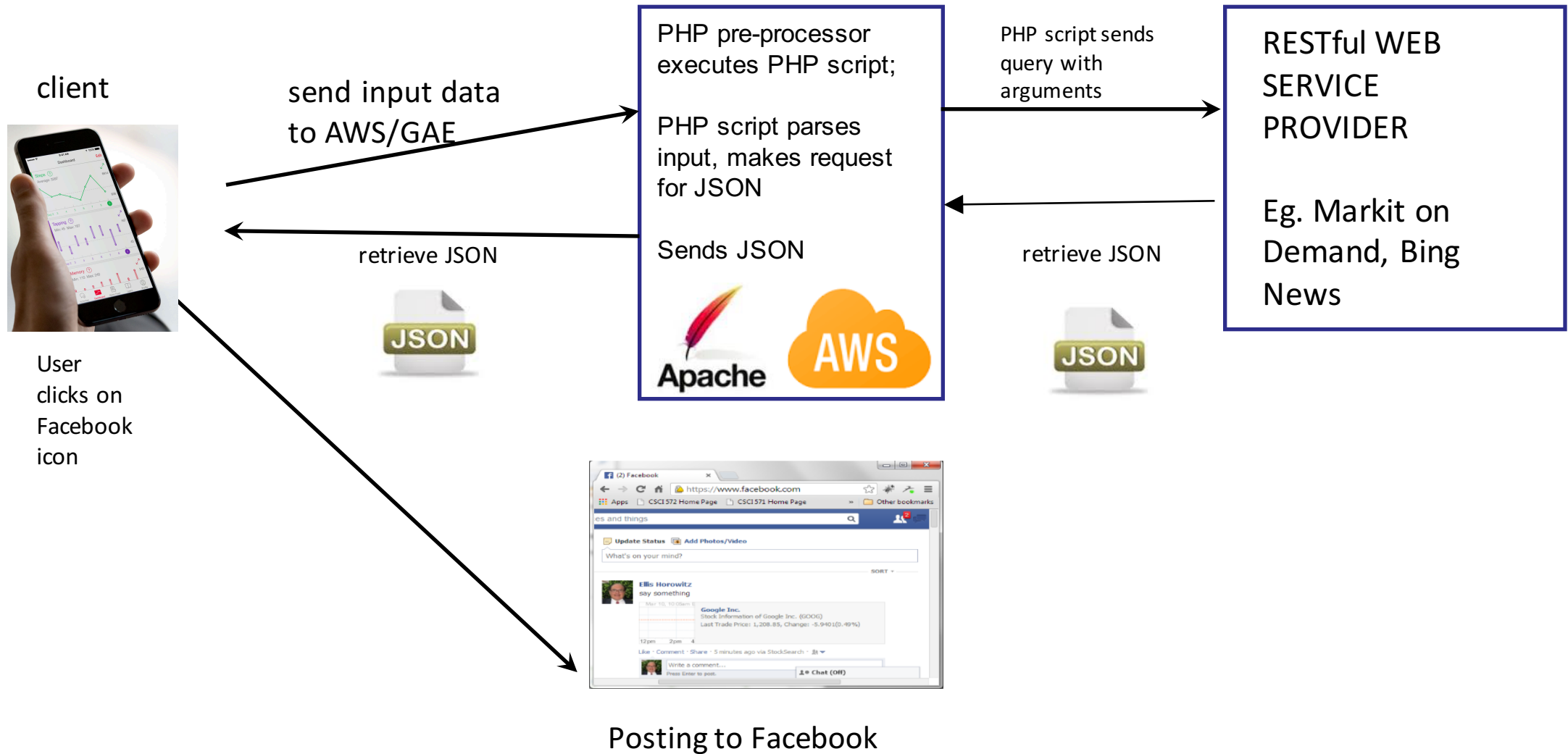
- https://youtu.be/TzRcgIdp27U

Tutorials

- Lynda.com:
  - iOS 9 App Development with Swift 2 Essential Training
  - Swift 2.0 Essential Training

Architecture Overview

client

send input data
to AWS/GAE

retrieve JSON

User
clicks on
Facebook
icon

PHP pre-processor
executes PHP script;

PHP script parses
input, makes request
for JSON

Sends JSON

Apache AWS

PHP script sends
query with
arguments

retrieve JSON

RESTful WEB
SERVICE
PROVIDER

Eg. Markit on
Demand, Bing
News

Posting to Facebook

Implementation

- Use Story Board to create 4 scenes
  - Main Scene
    - Search Form
    - Favorites Table
  - Current Scene
    - Stock details and Current stock value chart
  - Historical Scene
    - A chart displays historical stock value
  - News Scene
    - Displays news feed of the stock company
- Use CocoasPod to install dependencies and third party modules
  - https://cocoapods.org/

Clues In Detail

Integrate CocoaPods

- 1. Install cocoas pods by following the instructions at https://cocoapods.org/
- 2. Create a Podfile in your Xcode project, file content are like the 'Get Started' section in the CocoaPods website
- 3. Run 'pod install' in your terminal
- 4. Open the 'xxxx. xcworkspace' file and you will have CocoaPods integrated
- 5. Import the modules in your project using 'import xxxx'
- 6. When new modules are needed, add new lines to your Podfile and run 'pod install' again

Main Scene

- Search Form
  - Use 'UITextField' as the input field
  - Use third party modules like MLPAutoCompleteTextField, CCAutocomplete, MJAutoComplete to implement the Auto-complete feature
  - Install these modules using CocoaPods

- Favorites
  - Use 'UITableView' to display the stocks
  - Use 'UIActivityIndicatorView' to indicate loading status
  - Use 'UISwitch' to implement the auto refresh feature
  - Use 'Core Data' to store and retrieve the favorite list and also the configuration of auto refresh or not

Main Scene Contd.

- Problems you may run into:

- Validation:
    - Display an Alert View in iOS8 with Swift

- When you try to make a request to web server:
    - Transport Security has Blocked a cleartext HTTP

- Table View
    - How to get the info of a selected row in table
    - Add swipe to delete feature in table view

- Core Data
    - Use core data to save favorite stock names
    - Delete data from core data
    - Add core data support to existing swift project
    - The model used to open the store is incompatible with the one used to create the store

- Timer
    - Swift - Do something every x minutes

Current Scene

- Stock Details
  - Use 'UITableView' to display the detail information
  - Use 'UIImageView' to display the stock value chart
  - Use 'UIScrollView' to contain the two view above to enable scroll
  - Use 'Core Data' to store the stock symbol when stared
  - Use 'FBSDKShareDialog' to share the stock, the contented shared should be set with 'FBSDKShareLinkContent'

Historical Scene

- Historical Chart
  - Use 'UIWebView' to load a local html into the page
  - [UIWebView example using Swift in IOS](#)

News Scene

- News Feed
  - Use 'UITableView' to display the news articles

Resources

- Icon Set: https://icons8.com/