

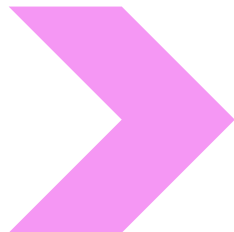


Joshua • Gavin • Johnny • Monica • Bob • Kangmin



# The Problem?

Meeting People  
can be hard at a  
large school like  
USC



Students feel  
isolated on  
campus as they  
struggle to find  
community



Product



Development



Teamwork



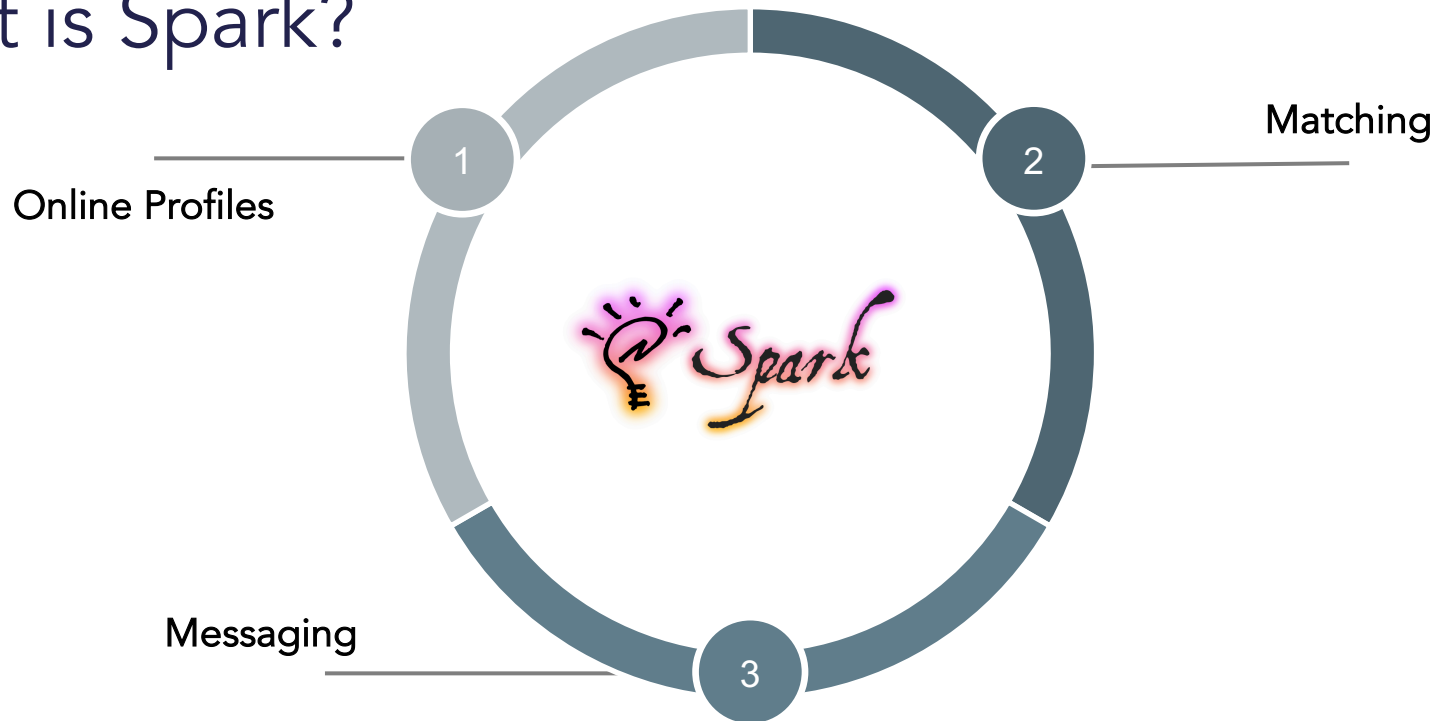
Requirements



Demo



# What is Spark?



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Requirements



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# Data Structures

## Data Management

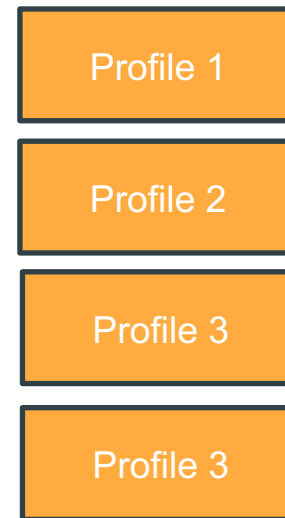
- HashMap of Potential Matches
- Vector for displaying matches
- Stack of all Users for Swiping
- Set of all existing matches for a user

## Data Communication

- JSON for passing data from Servlet

## Swipe Page Stack Example

Visible  
Profile →





# Data Structures

## Data Management

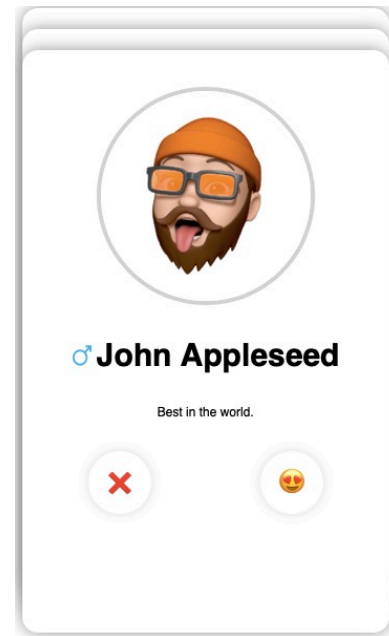
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# External Classes

## Technical

- 01 CSCI 104 – DS & OOP
- 02 ITP 140 – Mobile Apps
- 03 ITP 303 – Full Stack Web Development
- 04 ITP 104 – Intro to Web Design

## Business

- 01 BAUD 301 – Tech Entrepreneurship
- 02 BAUD 304 – Organizational Behavior
- 03 BAUD 302 – Communication Strategies



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# Professional Development

## Ideation

1. Market Research
2. Consumer Needs Assessments

## Design

1. UI / UX Design
2. Color Blocking
3. Intuitive Design (5 Click Rule)

## Coding

1. RESTful API's
2. Version Control
3. External Libraries



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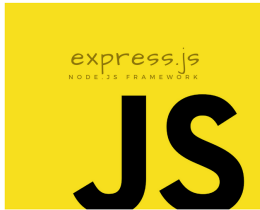
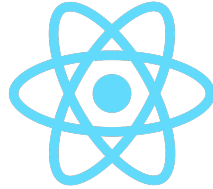
Teamwork

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# Skills and Tools



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# Product Design

## Positives



Using External Libraries  
and Frameworks



Simple, organized  
Databases

## Negatives

Repetitive Code –  
CSS Across Pages



Confusing Page  
Navigation



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# Teamwork

## Positives



Communication  
Outside of Meetings



Documentation  
Provided Structure

## Negatives

Merging Code  
at the End



Confusing Page  
Navigation



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# Login Functionality

## Guest Users



View Registered  
User Profiles



Navigate between  
different pages

## Logged-in Users

Match and Like  
other Profiles



Message Matches  
in Chatroom



# Login Functionality

## Premium Users



View which users have  
liked you and match  
with them if you  
choose

# Networking & Multi-threading

## Networking



Tomcat 9



Messaging  
Matches

## Multi-Threading



Live-Match  
Notifications

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# Demo



Username

Password

Confirm Password



Product



Development



Teamwork



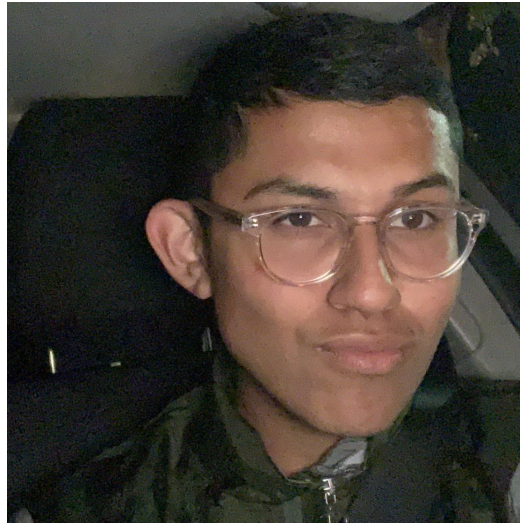
Requirements



Demo



Thanks! Shout out to Alfonso for being the 🐐 CP



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