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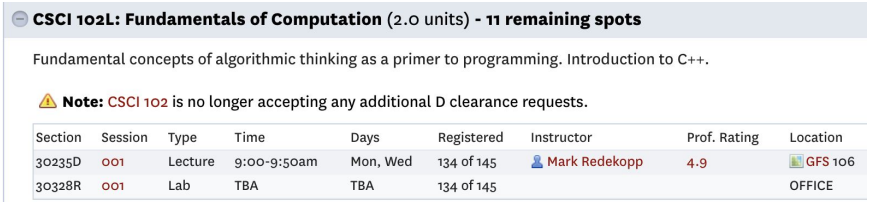
Why we created Rate My Class

RateMyClass

1. Realized need for students to have access to course information outside of school website.
2. Lack of resources available (outdated Reddit threads if you're lucky).
3. We want a place for USC students to be able to share their experience to offer more insights to other prospective students.



CSCI 102L: Fundamentals of Computation (2.0 units) **- 11 remaining spots**

Fundamental concepts of algorithmic thinking as a primer to programming. Introduction to C++.

Note: CSCI 102 is no longer accepting any additional D clearance requests.

Section	Session	Type	Time	Days	Registered	Instructor	Prof. Rating	Location
30235D	001	Lecture	9:00-9:50am	Mon, Wed	134 of 145	Mark Redekopp	4.9	GFS 106
30328R	001	Lab	TBA	TBA	134 of 145			OFFICE

Design | Implementation | Demonstration

Project Design

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What Worked

- General design + essential features
- Comments and Likes
- Search function
- GUI

What Didn't

- Extra features
  - Spell check
  - Notification system
  - File Upload
- Our ideas were often loftier than the time/skills we had

Teamwork

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What Worked

- Idea generation
- Documentation was a team effort
- Weekly meetings were helpful in keeping us all on track
- Used our strengths and weaknesses - some better at front-end, others back-end

What Didn't

- Unforeseen circumstances, created setbacks to finishing
- Version control was a mess
- Should have followed a more rigid timeline
- Extremely difficult to work remotely, as much of our code relied on on another

Software Used

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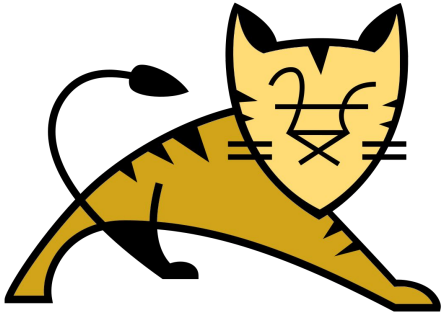
- Tomcat
- JDBC
- GCP
- Ajax
- jQuery
- GSON
- GitHub
- Slack
- Google Drive



Software Used - JDBC

Java Database Connectivity

- Developed by Oracle
- Application programming interface used to connect to databases with Java
- Used in our server to access GCP

Software Used - GCP

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Google Cloud

Google Cloud Platform

- Cloud computing services offered by Google
  - Includes more than just Cloud SQL service
- We'll be referring to Cloud SQL as GCP
- Stores:
  - Users
  - Courses
  - Comments
  - Likes

Software Used - GSON

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Google GSON

- Open source library to serialize and deserialize Java objects into JSON
- Used to transfer Course/Comment data between frontend and backend

Software Used - jQuery

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- Allows us to use a simpler syntax for selecting HTML code in JS
- Simplifies syntax for AJAX calls
- "Write less, do more"

Software Used - GitHub

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- Version control system
- Merging and branching helps keep a clean master and manage collaborative code
- Used the built-in integration in Eclipse, had some difficulties at first

Data Structures Used - Overview

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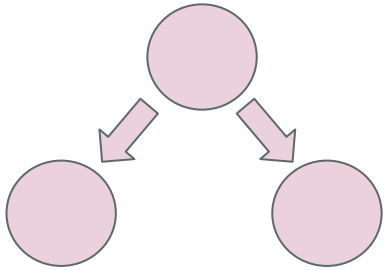
Basic Data Structures

- Lists
- Binary Tree (innoDB)

Custom Data Structures

- Course Object
- Comment Object
- User Object

Data Structures Used – List + Binary Tree



Usage of List, including but not limited to:

- Printing objects / data
- Small sample-size searching

Usage of Binary Tree:

- Storage engine (InnoDB) of Google mySQL database

Data Structures Used - Course Object

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Course Object

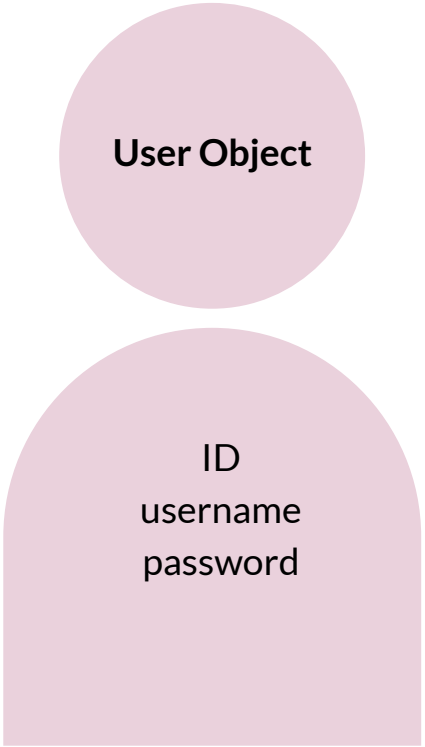
Includes:

- Course ID
- Course Name
- Internal Course ID
- Course Description
- Difficulty
- Workload
- GPA
- Number of Ratings

Usage:

- Stores all data of a Course
- Used for displaying Course data
- Can be initialized with a ResultSet entry from GCP

Data Structures Used - User Object



Usage:

- Stores all data of a user
- Used in user authentication
- Is used by other objects such as comment object

Data Structures Used - Comment Object

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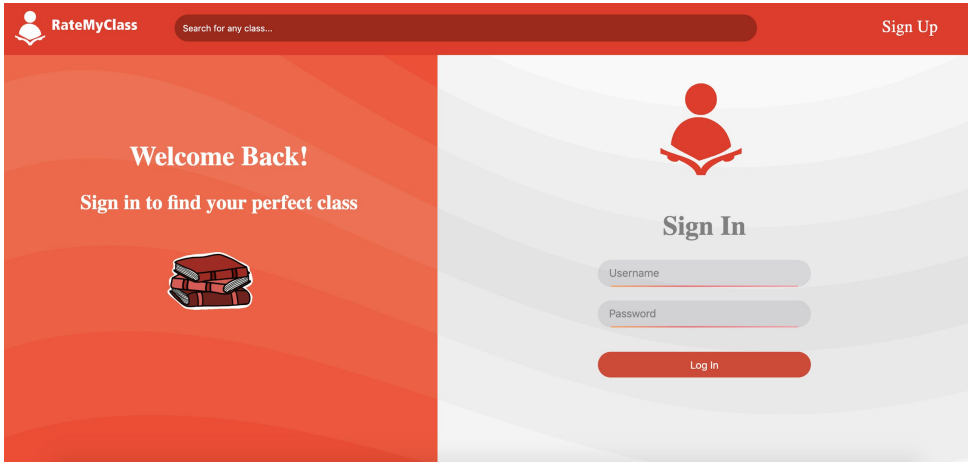
Comment Object

CommentID
CommentBody
CommentDate
UserID
UserName
TotalLikes
currUserLikeValue

Usage:

- Stores all the info needed when displaying a comment
- Used upon course page load to show all comments made by other users
- Also has an internal like and dislike counter.

User Login Functionality



- Validation done on backend
  - Outputs appropriate error messages
  - Forwards to homepage if authenticated
- User information stored in GCP
- Compatible with password managers

Multi-Threading

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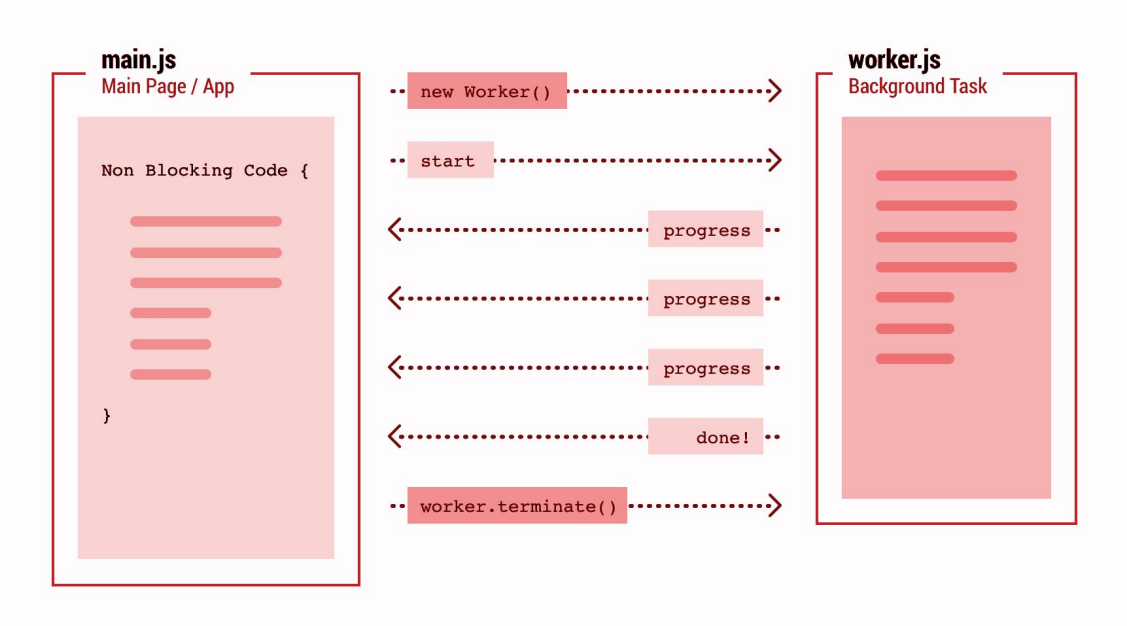

- Used Web Workers
- Separate thread used to check if a Course got new reviews
- Avoids blocking the main thread and only alerts when needed

Networking

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- Through commenting, users can interact with one another
- Not only through text, but also by liking and disliking each other's comments which will affect order in which comments are displayed.

User Info	Comment
william 12/03/2019	TEST TEST 
brian 12/03/2019	TEST TEST 

Courses Outside CSCI 201

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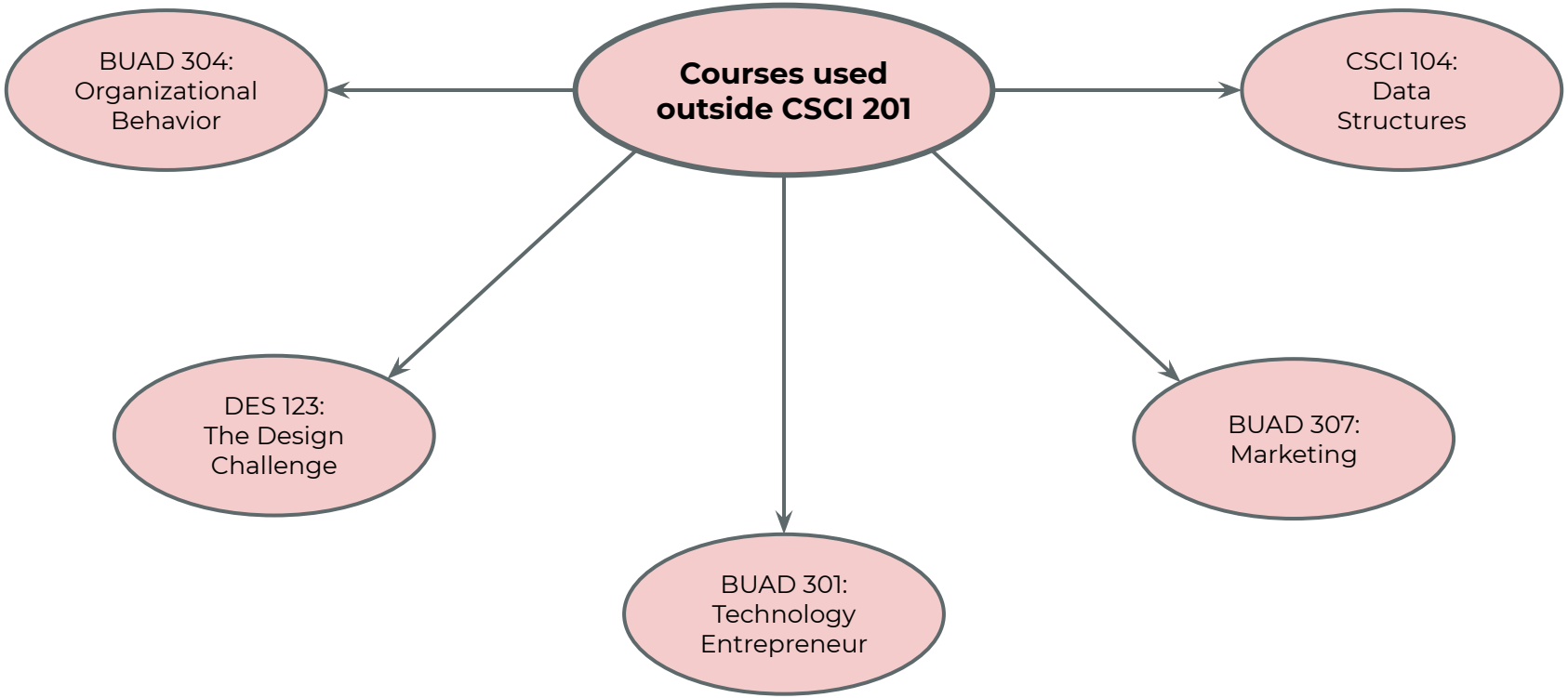
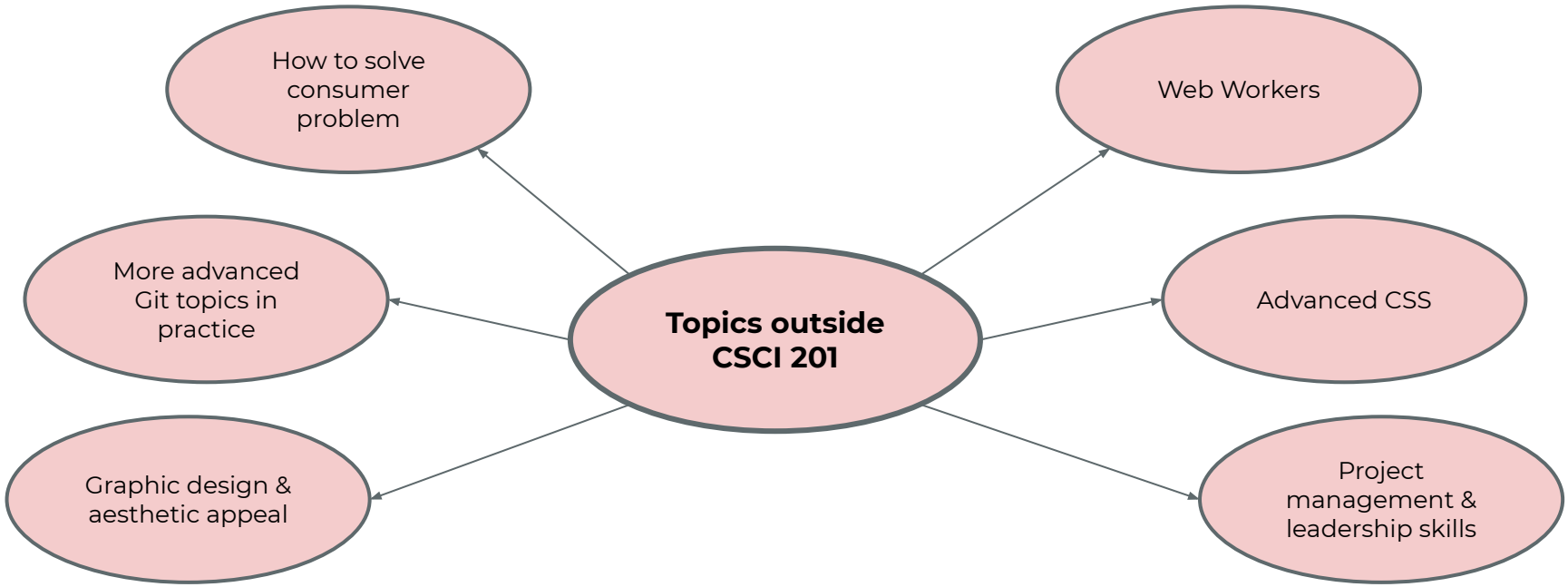


Design | **Implementation** | Demonstration

Topics Outside CSCI 201



Design | **Implementation** | **Demonstration**

Demonstration