# Refactored-Guacamole

## Spring 2019

### Group #8

*Royan Hanson*
*Micheal Smith*
*Chad Smith*
*Yash Shah*
*Paul Lee*

Feb 5th, 2019

(2) Resumes

# Yash Shah

## RELATED COURSEWORK

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*Data Structures*

- Basic concepts and analysis of data representation and associated algorithms, including linearly-linked lists, multi-linked structures, trees, searching, and sorting

*Computer Organization and Programming*

- Main topics include computer structure and machine language, addressing techniques, macros, file I/O, program segmentation, and linkage

*System-Level Programming*

- An introduction to programming at the level of the operating system. Topics include editors, system calls, programming tools, files, processes, interprocess communication, and shells

## SKILLS .

**Programming:** Java | C | Assembly Language

**Technologies:** Eclipse | Github | Slack | Visual Studio | PowerPoint

# Micheal Smith

## RELATED COURSEWORK

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*Data Mining*

- The process of discovering patterns in large data sets involving methods at the intersection of machine learning, statistics, and database systems

*Design & Analysis: Algorithm*

- Algorithms course with an emphasis on teaching techniques for the design and analysis of efficient algorithms, emphasizing methods of application.

*Computer Architecture*

- learn to design the computer architecture of complex modern microprocessors.

## SKILLS .

**Programming:** Java | HTML | CSS | Node.JS | JavaScript

**Technologies:** Visual Studio Code | Github | Slack

# Paul Lee

## RELATED COURSEWORK

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*Data Structures*

- Basic concepts and analysis of data representation and associated algorithms, including linearly-linked lists, multi-linked structures, trees, searching, and sorting

*Computer Organization and Programming*

- Main topics include computer structure and machine language, addressing techniques, macros, file I/O, program segmentation, and linkage

*Computer Vision*

- An introduction to the field of computer vision. This topic includes image processing, and all of the math theory behind computer vision.

## SKILLS .

**Programming:** Java | Assembly Language

**Technologies:** Eclipse | Github | Visual Studio | PowerPoint

# Royan Hanson

## RELATED COURSEWORK

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*Data Structures*

· Basic concepts and analysis of data representation and associated algorithms, including linearly-linked lists, multi-linked structures, trees, searching, and sorting

*Design & Analysis: Algorithm*

- Algorithms course with an emphasis on teaching techniques for the design and analysis of efficient algorithms, emphasizing methods of application.

*Computer Architecture*

- learn to design the computer architecture of complex modern microprocessors.

## SKILLS

.**Programming:** Java | C | X86

**Technologies:** Visual Studio Code | Slack | Eclipse

# Chad Smith

## RELATED COURSEWORK

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*Data Structures*

- Basic concepts and analysis of data representation and associated algorithms, including linearly-linked lists, multi-linked structures, trees, searching, and sorting

*Computer Organization and Programming*

- Main topics include computer structure and machine language, addressing techniques, macros, file I/O, program segmentation, and linkage

*System-Level Programming*

- An introduction to programming at the level of the operating system. Topics include editors, system calls, programming tools, files, processes, interprocess communication, and shells

## SKILLS .

**Programming:** Java | HTML | CSS | Assembly Language

**Technologies:** Eclipse | Visual Studio | Sublime Text | Codeblocks

(3) refactored-guacamole

| Assignee Name | Email | Task | Duration (Hours) | Dependency | Due date | Note |
|---|---|---|---|---|---|---|
| Micheal Smith **(Team Coordinator)** | msmith303@student.gsu.edu | -Github<br>-Groupme<br>-Google Docs<br>-Problem Statement | 2 Hours | Get everything running | 1/26/2019 | None |
| Paul Lee | plee30@student.gsu.edu | -System Requirements | 4 Hours | | 1/28/2019 | None |
| Royan Hanson | rhanson3@student.gsu.edu | -Problem Statement | 1 Hour | | 1/27/2019 | None |
| Yash Shah | yshah4@student.gsu.edu | -Teamwork Basics | 2.5 Hours | None | 1/29/2019 | None |
| Chad Smith | csmith324@student.gsu.edu | -Problem Statement | 1 Hour | | 1/26/2019 | None |

(3) TeamWork basics

In order to maximize group success, it's important to not only meet deadlines but also keep group satisfaction high. In order to achieve this goal, it's important for group members to hold themselves accountable and also be transparent when they're running behind schedule or need help. Moving forward, work will be distributed according to everyone's strengths. Also a project facilitator will be used for each assignment whose responsibilities include holding people to deadlines and generally maintaining team satisfaction.

Work will be distributed in sections to each group member. We decide on deadlines during our scheduled in-person meetings and post them to the slack channel. If someone is incapable of meeting his or her commitment, we will take note of it and try to provide that group member with support as needed. If that member is still incapable of meeting their responsibilities, the remaining work will be distributed to other team members. While group members will have different work habits, having set deadlines will ensure that work continues to work at a maintainable pace for the group.

In our group, we will be using a facilitator. The facilitator will help with: scheduling meetings, guiding online and in-person discussions on how to keep the project moving forward, reminding members of deadlines, and generally holding members accountable to the commitments and expectations agreed upon during in-person meetings.

We will be keeping in contact with each other frequently using groupme and semi-frequently at in-person meetings. Our meetings have usually taken place after class as that seems to be when everyone is available. Moving forward, meetings will be held in the library, unless for some reason that isn't possible. People who are late for the meeting will need to be caught up on what the current tasks are. Those who miss a meeting entirely will be expected to get caught up using groupme. Several missed meetings will result in a discussion with a said team member. If they do not adjust their behavior moving forward, it may result in their work being reassigned and a note sent to the professor.

Eating at meetings will be allowed as long as it doesn't distract from the purpose of the meeting. Smoking during the meetings would not be appropriate, but members are free to smoke outside before meetings. In general, the behavior is permitted as long as it's not disruptive. If one of the group members finds these guidelines to be unfair or inappropriate, then they should attempt to discuss this with either the group or the facilitator and seek out a solution.

Handling difficult behavior between group members is an essential step in keeping the team moving forward and maintaining group satisfaction. Someone who is argumentative may have good advice and feel frustrated, in such a case it is important to hear them out and see if they are making valid points; however, when a member is critical without being constructive then it is important to make clear the negative affect their criticism is having on the team.

Being overly-talkative can help in a team dynamic to get a discussion flowing, but not when they are dominating the discussion. Humor tends to be a good method of redirecting a conversation, but continued behavior should be discussed. The individual will be told that their enthusiasm is appreciated, but it is only fair that each member feels like they have a chance to contribute.

Being unable to reach a consensus can be a major obstacle. If we are unable to agree, we will use multi-round voting and eliminate options until we can come to a decision. The final decision remaining will be the option we decide to go forward with.

Alternatively, making a decision too quickly can result in work being unfinished or messy. A team member that is quicker to a conclusion then the rest of the group should be prepared to articulate how they came to their decision. At any point, if a team member feels a decision is reached too quickly, they are strongly encouraged to speak up. The group will then go back and discuss the issue more in depth.

Having different grade expectations can be detrimental to the team's progress and should be addressed to find a way to maximize the group's satisfaction. Based on discussions held so far, it seems everyone is seeking an A on this and future assignments. However, this might change later in the semester as assignments become more difficult. In this case, it may be necessary to assign work according to each member's expectations and give them a task that would better match their level of enthusiasm. For example, assigning a smaller part of the assignment but still expecting quality work. The remaining work will be evenly distributed amongst the group members who have higher grade expectations. In the event multiple group members do not feel

the drive to seek out an A, a compromise will have to be regarding the overall quality of work. This compromise will be heavily dependent on the nature of future assignments.

## (5) Problem statement

-What is your product, on a high level?

On a high level, our project is a collection of large databases that will be used to collect information. The information collected from these databases will be used to keep track of current movie tickets available at each movie theater for each movie in the area you are in.

-Whom is it for?

Our website is aimed towards consumers on both side the movie buying spectrum. There are people who are hardcore movie fans that already know what they want to watch and just need a simple way to purchase movie tickets. Then they are people who go out once in a while who do not know what is in theatre and want to see what is showing which might lead to a ticket being purchased through us.

-What problem does it solve?

_____ solves the problem that movie goers always find themselves in, the need of a simple way to find and purchase tickets to their favorite movies. Our website entertains, informs and guides movie fans with must-see trailers and movie clips. We strive to make it fun experience to find and buy the right movie at the right time. _____ is available online, and through our mobile version website. We welcome movie fans on Facebook, Twitter, Instagram, Tumblr, Google+ and Pinterest.

-What alternatives are available?

/*They are other alternatives out there to purchase tickets online like Fandango, Atom Tickets and Movietickets. Also most movie theaters offer their own online ticket purchasing on their website.*/

-Why is this project compelling and worth developing?

The project is worth developing because the age we live in a lot of people who are in their 20s or younger don't really watch cable television so they usually don't know what movies are out or about to come out. This project will help with that by showcasing all the top movies that are out, show you what movies are about to come out, and will also allow them to purchase tickets for the movie.

-Describe the top-level objectives, differentiators, target customers, and scope of your product.

The objective is to give our consumers, another alternative to purchase movie tickets, while also showcasing all the top current and upcoming movies out. Our target customers is anybody who is trying to watch movies.

-What are the competitors and what is novel in your approach?

- www.Fandango.com
- www.atomticket.com
- www.movietickets.com
- Easy to read to site
- Offers a place to watch trailers, showtimes and purchase tickets

-Make it clear that the system can be built, making good use of the available resources and technology. Because there are other websites and apps that have already done this, we can use those sites as resources and data for our project.

-What is interesting about this project from a technical point of view?

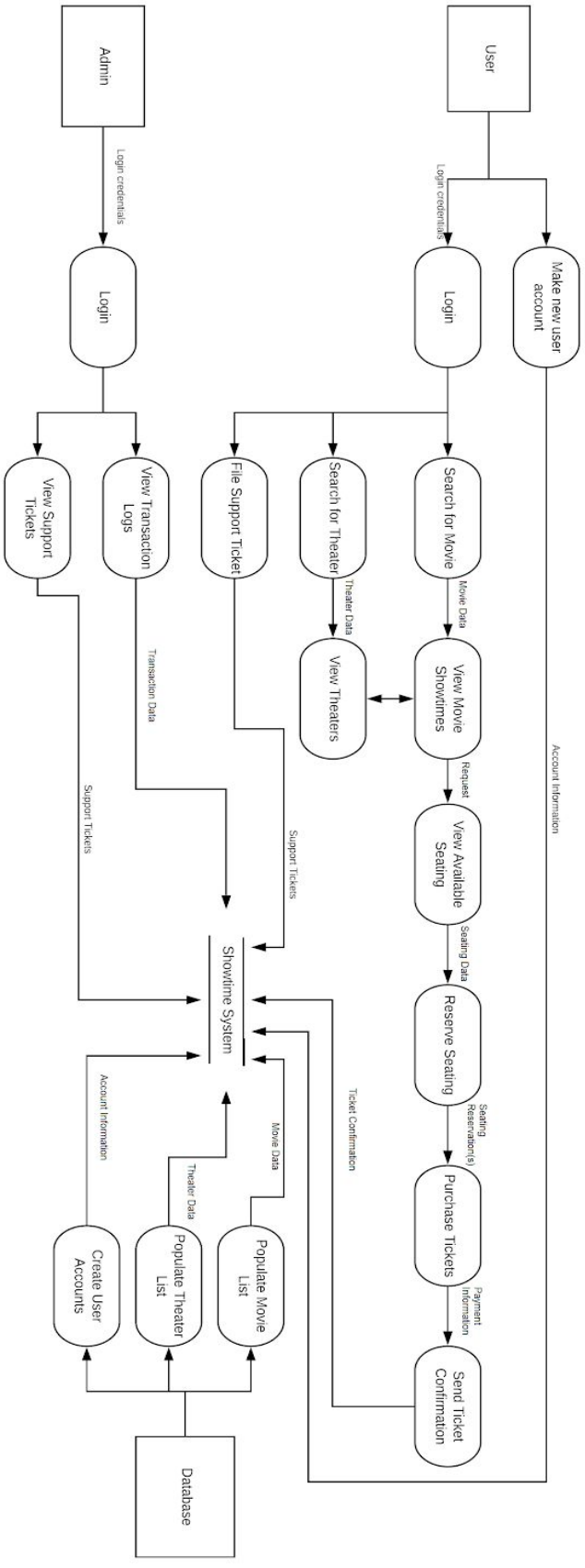
## (6) System Requirements

The following data flow diagram shows the architecture of our system. Aside from the admin users, common users will have to make new accounts to login. Each user having their own account allows for easier access to tickets purchased, and each account can hold information on the customer's preferences for theaters and movie types. Users are prohibited from viewing information about other accounts. An employer or admin may view ticket transaction logs and support tickets filed by users. The system's components and processes are listed below.

**Processes:**
-Login
-Make new user account
-Search for movie
-Search for theater
-File support ticket
-View movie showtimes
-View theaters
-View available seating
-Reserve seating
-Purchase tickets
-Send ticket confirmation
-View transaction logs
-View support tickets
-Populate movie list
-Populate theater list
-Create user account

**Data:**
-Account information
-Movie information
-Theater information

**External Entities:**
-User
-Admin
-Database


User
Make new user account
Login credentials
Login
Search for Movie
Movie Data
View Movie Showtimes
Request
View Available Seating
Seating Data
Reserve Seating
Seating Reservation(s)
Purchase Tickets
Payment Information
Send Ticket Confirmation
Account Information
Search for Theater
Theater Data
View Theaters
File Support Ticket
Support Tickets
Ticket Confirmation
Admin
Login credentials
Login
View Support Tickets
View Transaction Logs
Transaction Data
Support Tickets
Showtime System
Account Information
Theater Data
Movie Data
Create User Accounts
Populate Theater List
Populate Movie List
Database