



Projects for USF CS Students 2023

By Jose Alvarado

Introduction



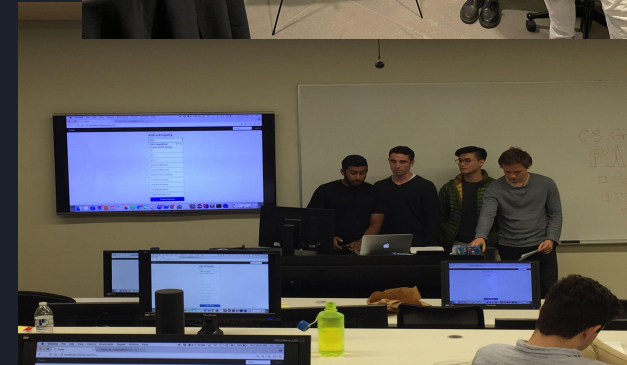
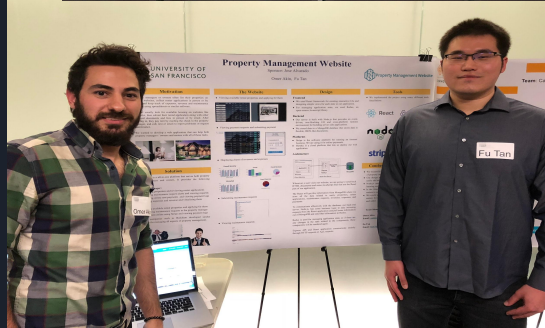
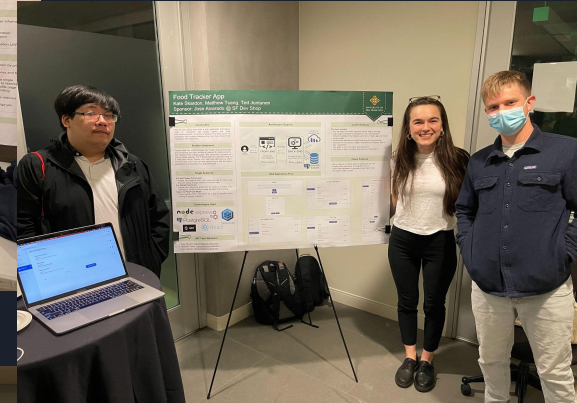
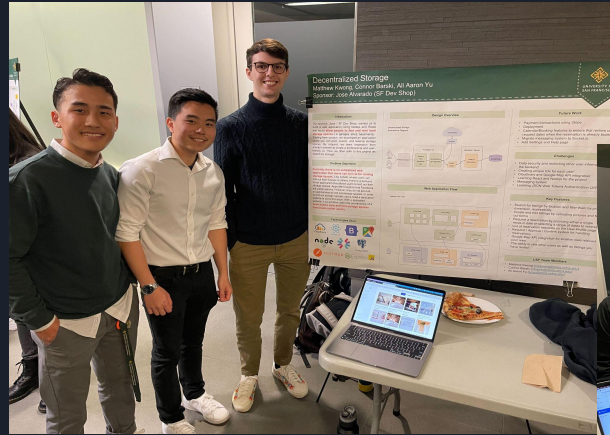
Jose Alvarado

2015: M.S. in Computer Science from USF

- Business Owner
- iOS Software Engineer
- Sold Battle Blast Laser Tag in Nov 2022 for \$500K
- Engineering Manager where I managed the mobile, web, and platform teams
- Founded 3 startups
 - 2 successful exists
- Founded SF Dev Shop
 - Freelance projects on the side for other companies

Student Stats

- Feb 2017 - Present
- Worked with 139 students
- 40 Projects



Students I worked with recently

Project Name	Year	Name
Food Tracker	2022	Teddy Juntunen
		Kate Skardon
		Matthew Tsang
Business Marketplace Aggregator	2022	Palak Jain
		Nilima Jha
		Manas Veena Prasad
Decentralized Storage	2022	Connor Barski
		Matthew (Matt) Kwong
		Ali Gyu
Food Tracking	2022	Leonardo Framba
		Alex Zeng-Yang
Reservation and Party Booking	2022	Shelger Zhang
		Chufeng Qiao
		Shumin Zhang
Food Ordering	2022	Jingke Chen
		Yifan Meng
		Katie Cox
Habit Tracking	2022	Arnau Vila Manes
		Edward Rees
		Kate Walker
		Sophia Ladwiniec

Project Name	Year	Name
Work Schedule	2022	Gordon Mai
		Kai Burkholder
		Serena Villanueva
Friend Lotto	2021	Haru Khoo (Yi Qinc)
		Nora Cheng
List of Lists	2021	Shulin Li
		Yiqi (YiChi) Wei
		Saige Madden
TV/Movie Recommendation	2021	Gurjot Kaur
		Yordanos Solomon
		Cara Ingram
		Jenna Radwan
City Log Platform (Web)	2021	Maxwell Bruckhaus
		Keita Nonaka
		Berk Burak Tasdemir
Dating Platform (Web)	2021	Shan Jiang (Shawn)
		Haoyu Yan
		Muzhi Zhang
Dating Platform (Web)	2021	Li Liu
		Jiaoao (Diana) Yu



Projects

- CRM for real estate agents
- App to rent out home gyms
- CS Senior Master Class
- App to track the process/stage of a service based business
- App to find salons, dentist, spas, etc and make appointments
- App to A/B test restaurant menus



CRM for real estate agents (Web)

Project Goal

- Create a CRM (Customer Relationship Management Platform) that is easy to use and affordable

Advanced Goal

- Create profiles for companies to manage multiple agents and have an administrative portal that allows them to view activity and statistics across their whole company

Key Features

- Create profiles for agents
- Manage a list of contacts
 - Contact info
 - Add notes
 - Classify type of lead
- Schedule calendar appointments
 - Include address
- Send emails to clients
- Monthly subscription



App to rent out home gyms (Web or Mobile)

Project Goal

- Create an application that allows hosts to list their home gym and allow regular users to rent their gym
- Similar to Airbnb but with gyms

Advanced Goal

- Allow hosts to list specific gym equipment like bench press, squat rack, trap bar, etc. and allow renters to search by gym equipment
- Maybe allow users to rent specific equipment

Key Features

- Create profiles for hosts and renters
- Hosts can list their gym
- Search functionality
- Messaging system
- Booking system
 - Calendar integration
- Payment and rating system
- Notifications



CS Senior Master Class (Website)

Project Goal

- Create an application that allows professors to connect students with project sponsors

Advanced Goal

- Allow sponsors to create accounts and upload projects
- Professors can then search different projects and invite sponsors with great projects to their class
- Create university profiles and list professors, their classes, and the projects classrooms have successfully completed

Key Features

- Create profiles for professors, students, and sponsors
- Create classrooms
 - Invite students and sponsors
 - Edit class information
 - Add assignments and tasks
- View list of projects
- Messaging system
- Calendar and notification system
 - Define when sponsors and students meet
- Grading and feedback system



App to track the process/stage of a service based business (Web or Mobile)

Project Goal

- Create an application that allows service based business to update the status of their work to their clients
- For example
 - A mechanic inspecting a vehicle
 - Waitlist
 - Inspection In Progress
 - Reporting
 - Property surveyors
 - On the way
 - Onsite
 - Inspecting water lines
 - Completed

Key Features

- Create profiles for companies and employees
- System for creating and managing service orders
- System that allows employees to track the progress of a task within the service order
- Notification system
- Customer communication system
- Reporting system that allows business to see metrics
 - Completed orders
 - Avg turnaround time
- Rating system



App to find business and make appointments (Web or Mobile)

Project Goal

- Create an application that allows businesses to list their company and allows customers to book an appointment
- For example
 - Beauty salons
 - Dentists
 - Spas

Advanced Goal

- Allow customers to book appointments directly with an employee
- For example
 - Barbershops

Key Features

- Create profiles for companies and customers
- Booking system
- Messaging system
- Payment system
- Rating system
- Notification system
- Admin panel that allows businesses to manage reservations, approve bookings, and update availability



A/B test restaurant menus (Web or Mobile)

Project Goal

- Create an application that allows businesses to list their menu and customers to make orders
- Customers will also be able to keep track of what they ate

Key Features

- Create profiles for restaurants and customers
- A system for creating and managing menu items
- A system for creating and managing different versions of menus
- A system to keep track of orders
 - Allows restaurants to view which dishes are the most popular
- A reporting system that allows restaurants to analyze the results of all of their menus
- Customer feedback system



Schedule/Goals

- Week 1: Intro & Walkthrough
 - a. Tutorials
 - b. Access to GitHub
- Week 2: Backend Tutorials: Node.js
- Week 3: Frontend Tutorials: React.js or Swift
- Week 4 - 12: Project Tasks
 - a. Bi-weekly tasks will be provided based on the number of students in each team and their experience
 - b. Weekly standups
- Week 13-15:
 - a. Wrapping up key features
 - b. Poster presentations
 - c. Working on extra features if your team is ahead of schedule

Preferred Tech

- Mobile Developer
 - Swift or Kotlin
 - React Native or Flutter
- Front End Developer
 - React or Vue
 - Material-UI, Ant Design
- Backend End Developer
 - AWS
 - Node.js with Express
 - Postgres Database
- Jamstack SAAS (Advanced)
 - Chakra UI
 - Next.js
 - NestJS
 - Prisma (Node.js and TypeScript ORM)
 - NextAuth.js (Authentication for Next.js)
 - Tailwind CSS



Why should you pick one of my projects?

You will learn enough to apply for a junior software engineering position

1. Mobile Software Engineer
 - a. National Avg. Salary: \$127,000
2. Node.js (API) Software Engineer
 - a. National Avg. Salary: \$110,000
3. React.js (Web) Software Engineer
 - a. National Avg. Salary: \$120,000
4. Real world experience
5. Opportunity to give feedback on the product and roadmap
6. Sprint workshops
7. Resume Review
8. LinkedIn Recommendation
9. Technical Interview Problems + Mock Interviews
10. No prior experience needed
 - a. You will learn the fundamentals as you go
 - b. Must have a desire to learn
 - c. 1-1 help to debug your code
11. Mentorship beyond USF
 - a. Grad School Recommendations
 - b. Job references
12. Resources
 - a. Tutorials & courses
 - b. Resume
 - c. LinkedIn
13. Connect with Alumni students through our Slack channel
14. Job Referrals
15. Public recognition when we launch!



Questions?

Feel free to reach out!

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