191For191 Final Demo

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Project Timeline

Weeks 1-3 → **Weeks 4-5** → **Weeks 6-8** → **Weeks 9-10**

Getting Started

– Meet with Prof Ziv

– Decide tech stack

– Figma, ER diagram

Starting to Code

- Learn tech stack

- Implement UI

- Database design

Connecting Everything

- CRUD endpoints

- Secure login

- Set up cloud storage

Finishing Touches

- Deploy website

- UI overhaul

- Secure endpoints
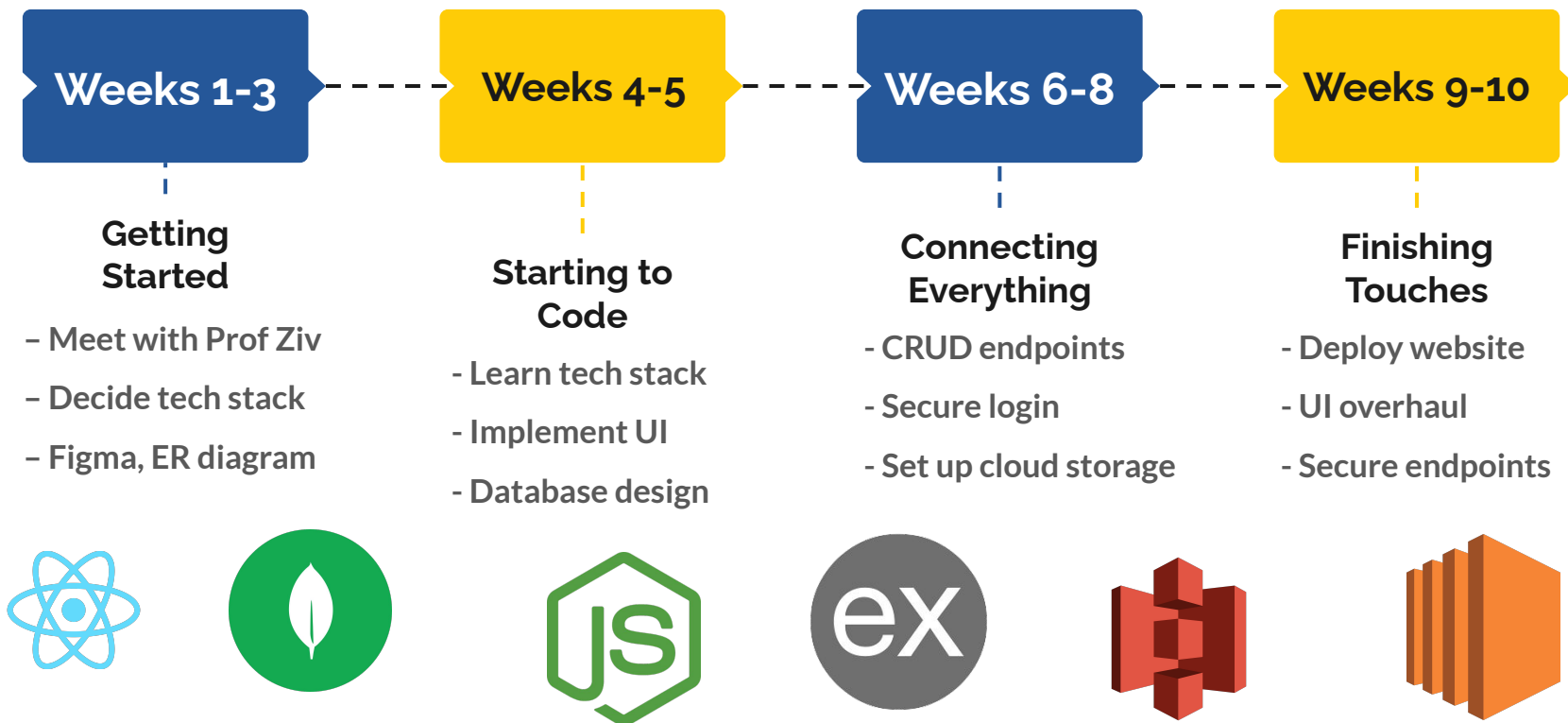
Struggles / Solutions

Original sponsor unexpectedly dropped out ⟷ Immediately met with new partner (Professor Ziv) to get back on track

Unfamiliarity with MongoDB ⟷ Iteratively updated database design and kept everyone informed

Improper merging on Github ⟷ Resolved merge conflicts together and worked on separate branches
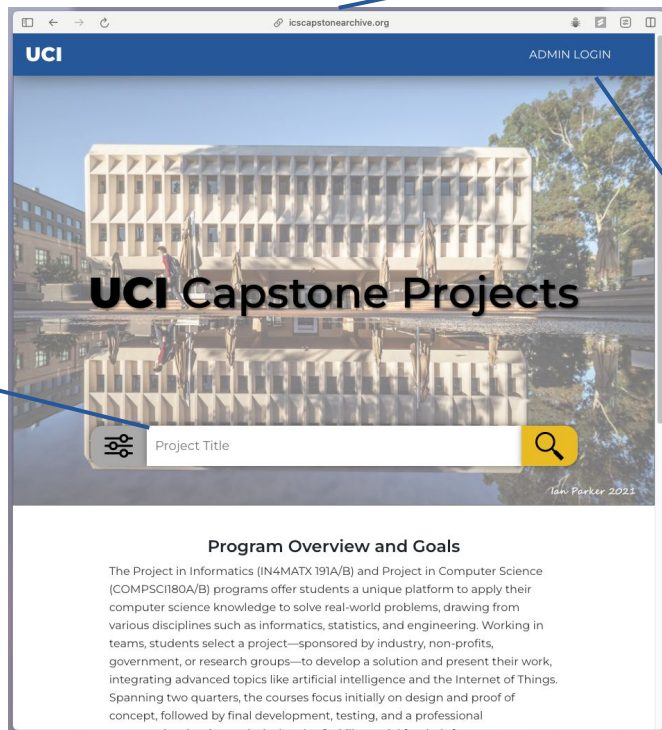
Struggles with finding a domain ⟷ Purchased a domain for ease of use and configuration (icscapstonearchive.org)
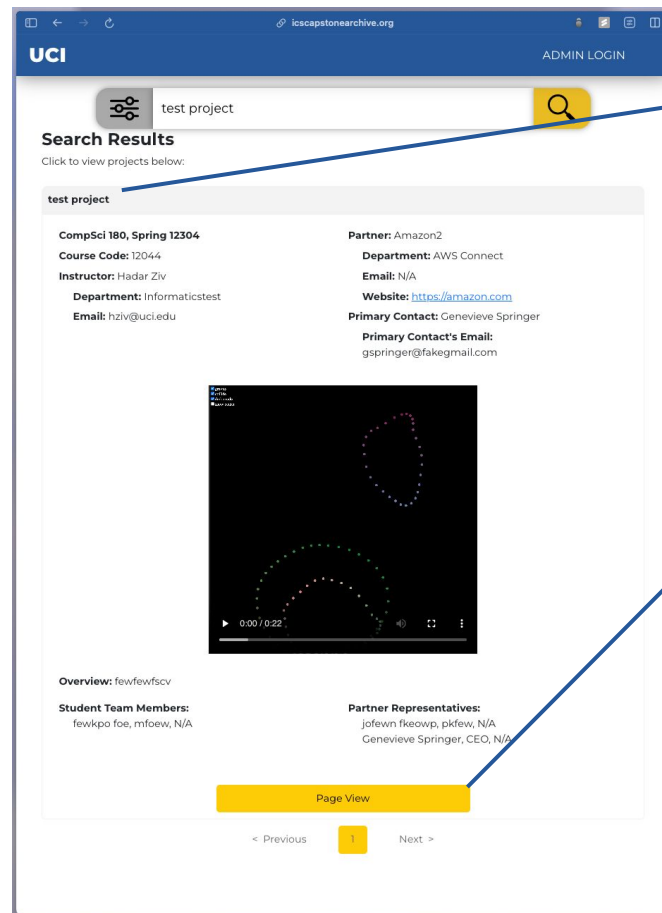
The Product

Easily accessible at icscapstonearchive.org

Search for projects by project name and filters

Admin login for more features

View project details and videos

Individual project pages

UCI
ADMIN LOGIN

UCI Capstone Projects

Ian Parker 2021

Project Title

Program Overview and Goals

The Project in Informatics (IN4MATX 191A/B) and Project in Computer Science (COMPSCI180A/B) programs offer students a unique platform to apply their computer science knowledge to solve real-world problems, drawing from various disciplines such as informatics, statistics, and engineering. Working in teams, students select a project—sponsored by industry, non-profits, government, or research groups—to develop a solution and present their work, integrating advanced topics like artificial intelligence and the Internet of Things. Spanning two quarters, the courses focus initially on design and proof of concept, followed by final development, testing, and a professional

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UCI
ADMIN LOGIN

test project

Search Results
Click to view projects below:

test project

CompSci 180, Spring 12304
Course Code: 12044
Instructor: Hadar Ziv
   Department: Informaticstest
   Email: hziv@uci.edu

Partner: Amazon2
   Department: AWS Connect
   Email: N/A
   Website: https://amazon.com
Primary Contact: Genevieve Springer
Primary Contact's Email:
gspringer@fakegmail.com

0:00 / 0:22

Overview: fewfewfscv

Student Team Members:
fewkpo foe, mfoew, N/A

Partner Representatives:
jofewn fkeowp, pkfew, N/A
Genevieve Springer, CEO, N/A

Page View

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Current version of the product

- Project is easily accessible from a named domain url, redirects to IP address of an AWS EC2 instance running the client and server
- Standard users are able to search for projects fitting various filters and easily view relevant details for each
- Standard users can view project videos and download deliverables, if they are uploaded for a given project
- Projects have separate page views so they are easily linkable, or can have all details displayed in project results for ease of use
- System Admins and Professors can log in
    - System Admins can create/edit/delete projects
    - Professors can create projects and edit/delete the projects they have created
    - Create/edit forms have validation ensuring data is correct

Persona

Dr. Rachel Chen

Rachel Chen has been a professor at UCI for the past 9 years. She is planning on teaching INF 191A in Spring 2025.

Motivation
Students often reach out to Dr. Chen with questions about INF 191. She currently has no way of showing the students past projects so they have an idea of the class.

I would love it if there were a better way to showcase my students' amazing work!

Desires
Dr. Chen wants a central place to add projects from her class that prospective students and partners can openly view.

Goals
UCI professors like Dr. Chen would like a website to compile all UCI capstone projects, stored in a secure database. These projects can be viewed by anyone, but only modified by the professors.

Demo

Scenario:
- Dr. Chen wants to access the website to add 15 projects from her class. She access icscapstonearchive.org and clicks on login button. Then she enters her ICS email and password to get in to the current project page.
- She clicks on "Add a project" and fills out all information required in the form include github repo, deliverable file and video file and then clicks 'Save'.
- The new project will be displayed in this page and she can verify if all information is correct.
- She realizes that she forgets to add project partner's website so she clicks on 'pen icon' to edit the project and click 'Save'
- She then realizes that this project has already been added so she click on 'trash can icon' to delete it. The prompt show up and ask if she actually wants to delete it and she clicks 'OK'.
- The project now has been deleted from the website and database.

Thanks for watching!

Old slides below here...

Project Timeline

- Original sponsor (OrganAI) dropped out at the end of Week 2
- Week 3, we met with our new project partner, Professor Ziv, and began working on system design for our new project, 191For191
  - Figma, ER Diagram
- Week 4, implemented first iteration of the UI design using React
- Weeks 5 - 8, worked on backend express server endpoints and implementing endpoints for CRUD operations, updating project user interface
- Week 9 - continue backend work and UI design, began to attempt deployment via various means, settled on hosting the website using AWS and purchasing a subdomain

Struggles

- Set back about a week and a half after original sponsor dropped out
- Improper merging on Github
- MongoDB
    - NoSql
    - How projects are stored in relation to courses
    - ObjectIDs
    - How we store representatives and teams in relation to projects
- Wasted several days in Week 9 on deployment to an ics subdomain after finding out that uci sites (open to use for all students), does not support scripting, and then again when we found that UCI's Apache web servers do not support node.js

How we dealt with our struggles

- Met up with new sponsor as quickly as possible to get back on track
- Called with each other to resolve merge conflicts and working on separate branches
- Constantly iterated on our database design and kept each other informed of what the changes were
- Ended up simply purchasing a domain (icscapstonearchive.org) for ease of use and configuration

Persona

Dr. Rachel Chen

Dr. Chen is a Professor of INF191A in Spring 2025. She has been working for UCI for 9 years.

Scenario:
- Dr.Chen wants to access the website to add 15 projects from her class. She access icscapstonearchive.org and clicks on login button. Then she enters her ICS email and password to get in to the current project page.
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Personas' Motivation, Goal, and Desire

Motivation:

Dr.Chen wants IN4MATX department has a website to store all projects from capstone projects courses.

Goal:

Dr.Chen wants to search, add, delete, edit projects from her class after she logs in to the website.

Desires:

Dr.Chen wants to spread this website to as many sponsors so they can look up the past capstone projects and interested in contributing many more projects for IN4MATX students in the next few years.