

- Schedule a meeting with your project advisor and the client to discuss your design from CPRE/EE/SE 491 and kick off the design for CPRE/EE/SE 492.
- **Prepare an agenda for the meeting, including the following items:**
 - Introductions
 - Review of your design from CPRE/EE/SE 491 (What did you accomplish? What did you learn? What next steps are you planning?)

During the previous semester, we developed several iterations of our system's architecture. Our finalized design from 491 encompasses the basic architecture for our frontend, backend, and the connection between both. On the backend, we will be utilizing a SQL database for storing data and leveraging AWS resources such as EC2 and RDS to make it accessible to our client without requiring local software. On the frontend, we will use the React framework combined with Node.js for developing the user interface. In terms of next steps, we are going to develop and iterate in two week sprints. We are currently planning our sprint tasks and installing any required development tools/software.

- Discussion of any changes or improvements to the design
 - Factor in Security
 - How will data be securely transferred?
 - How will we set up account privacy?
 - Will set up functionality to regionalize data based on the university and instructor
- Discussion of the objectives and requirements for CPRE/EE/SE 492

Objectives

- Technical Skills
 - For our team, this will focus on our programming skills, software architecture, basics of cybersecurity and other web development skills
- Professional Skills
 - Human-Centered Design
 - Communication and Inclusive Teamwork

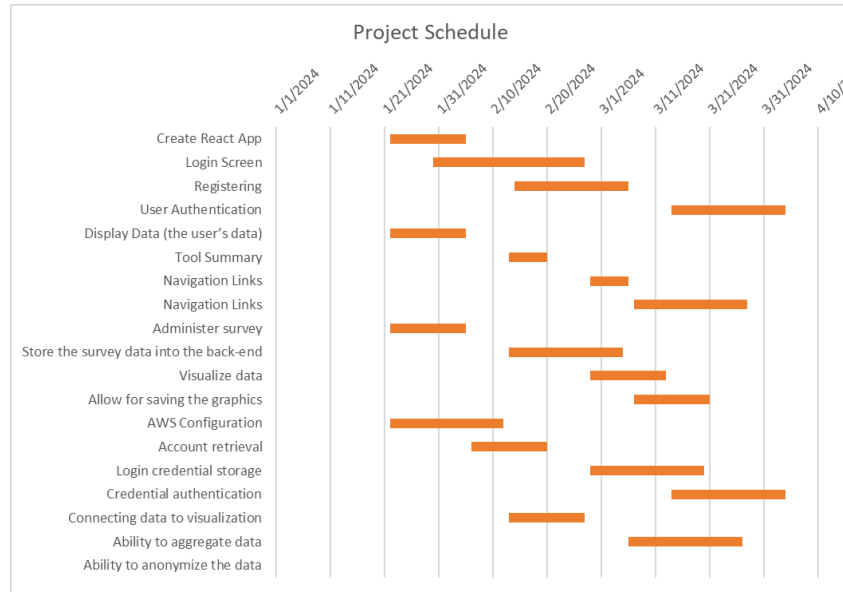
Requirements

- Implement the design from 491
 - Using Agile methodologies, implement and complete our design
- Deliver Final Report, Oral Presentation, and Project Poster
- Discussion of the schedule and milestones for the project

Our team is using an agile approach this semester, using our weekly team meetings as stand-ups and using GitLab for our stories and processes. We have milestones for both the front-end and back-end teams. The milestones for the front-end team are broken up by the application pages, and the back-end milestones are broken up by its components.

- Back-end Milestones:
 - The back-end can send aggregated survey data to the front end
 - The back-end can process and store user data dynamically – e.g., upon account creation, password creation, etc.
 - Document SQL schema table mappings
- Log In/User Milestones:
 - The user can create an account and later log back in with those credentials
 - User authentication/login works with 100% accuracy
 - Create Administrator and Student User roles and capabilities
 - Administrators can view many Student's survey results and data visualizations
 - Students can complete the Survey and view their personal data visualizations
- Home Screen Milestones:
 - Navigation to Results Page, Account Settings Page, and the Survey Page
 - Display information about the class and the different benchmarks the Survey is measuring.
 - If time allows, we will attempt to incorporate a video produced by the UI research time into the website to explain to students the purpose of the Survey.
- Results page
 - Multiple formats of data visualization are available
 - Results visualizations can be downloaded as a PDF
 - Administrators can view different Students' data
- Survey page
 - IINSPIRE LSAMP survey is embedded in the survey web page
 - Student results are saved to the database upon completing the Survey
 - Student data is saved to the database as they complete the Survey
 - The survey page remembers and navigates the Students to where they left off

The schedule is on track and we have not ran into any unseen issues to delay the project early into this semester.



- Review your team process and discuss any changes or improvements

The team process is separated into two teams: front-end and back-end. Both teams will work on their own parts that will later be joined together in our GitLab page. Both teams will be given their own set of issues assigned that will need to be completed with an assigned deadline. In terms of changes or improvements to our process from last semester, this semester will involve a lot more communication outside of our group. Due to the development cycle we are using, it is vital to meet regularly with our client in order to receive consistent feedback.

- Q&A session

Q: Dr. Rover, how will your involvement as our project advisor change from 491 to 492? Would you be a technical guidance resource if we encounter any roadblocks?

A: Dr. Rover will continue to work with us the same way she did in 491. She will not be a technical guide as she has not used many of the technologies, but she will help with communication and feedback.

Q: Ally (and any other clients on the meeting), how often would you like to meet to hear development updates? Bi-weekly? Monthly? As needed?

A: We will try to meet Bi-weekly.

Q: Sri provided valuable input during 491. Will she have any further involvement in the project?

A: Sri could be a valuable resource for testing. She is involved in the IINSPIRE program and could connect with students in the program who could provide feedback as well.

Q: To plan for the maintainability of the website, could IINSPIRE provide an AWS account they can keep running for us to work on?

A: We have received an account through ETG. Iowa State can continue to host the website in the future. There could be a chance we receive a new AWS account, so we will document the setup in case a different AWS account is necessary.

Q: Currently, we have admins can create an account, create a survey, view the results of a survey for all students as graphs, export/save graphs, and view the explanations that are generated with each graph. Are there any other desirable admin capabilities, such as having access to change survey questions or anonymize survey data results?

A: We are not currently planning on adding any additional functionality. Changing the survey questions and

Q: What level of security will be needed, e.g., must the data be encrypted between survey submission and researcher access? What does the UI IRB protocol require? They are currently using Qualtrics to administer the survey. What security does Qualtrics provide?

A: We will need to make sure the data is safe from SQL injection, and only students will be able to access their own data. Encryption of the general data will not be required, and Qualtrics' security is not known to us yet.

Meeting Notes

- Panel reflection
 - Defend SQL DB choice
 - Security - fully flesh it out + justification

- Document design decisions and justifications for using specific technologies - must be justifiable to panel of industry professionals
- What's next: get into workflow (2 week sprint development)
- Email directly to Dr. Ali + copy the students - thank for being our client, we need biweekly meetings so we can get feedback on what we're implementing – demos in our biweekly sprints
 - Everyone from our group may not be able to attend and that's OK
 - 5 demo cycles ideally
- User testing approach: get as much done as possible in a sprint and have users try it out to give feedback

- ISU could be the owners of our project and everything should be managed on AWS
- Factor in program ID to track and differentiate between different programs – students who participate in multiple programs
- Dr. Rover wants to be available for UofI meeting so loop her in on planning
- Potential future meeting: Monday's 8:30 on Zoom

Meeting Summary - IINSPIRE STEM Survey Visualization Tool - Team 35

Attendance

- Lydia McCleary
- Katie Hansen
- Nathan Frank
- Thomas Nunez
- Jimmy Driskell
- Abe Scheideman
- Dr. Rover

Key Points

In this meeting, we caught up with Dr. Rover and discussed plans for this semester. We explained that we intend to finish setting up our development environment over the next week. We also are planning out our sprints for the development cycle. Together with Dr. Rover we set a weekly time to meet with her to provide updates on our progress. We also reached out to our client at the University of Iowa to arrange times to meet with them.

Decisions Made

- Weekly meetings with Dr. Rover at 8:30am on Mondays via Zoom (tentative in case a better meeting time presents itself)

Action Items

- Finish setting up dev environment/installing any necessary frameworks
- E.g. Node.js
- Prepare story cards for upcoming sprints
- Set up meetings with our client at the University of Iowa

Next Steps

Our tentative next steps are to write out the development tasks we need to complete in order to create this project. From there, we need to prioritize the order to complete them in over the next couple of months.