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## **EE/CprE/SE 492 WEEKLY REPORT 1**

**End of Sem. 1 – 09/04/25**

**Group number: sddec25-10**

**Project title: SmartClass: Interactive Learning**

**Client &/Advisor: Md Maruf Ahamed**

### **Team Members/Role:**

- **Josh Dwight - Backend/Security**
- **Michael Geltz - Backend/System Admin**
- **Michael Becker - Frontend/Security**
- **Matt Gudenkauf - Frontend**
- **Logan Pfantz - Frontend & Advisor Liaison**
- **Ryan Lin - Frontend**

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### **o Weekly Summary**

Over the summer, our team mostly did research on what we can do moving forward into our second semester in Senior Design. Using the feedback that we received from the faculty, we had a general idea of what we should look into, as well as what we need to improve. A decent amount of time was spent looking into an SSO for our system (Globus). We also looked into how we could implement team quizzes as well as group submissions. Moving forward, we plan on trying to actually implement these things and improve our website and make it a product we're proud of. First, though, we need to get our server back up and running since it was taken down over the summer, even though we asked to have it be a permanent server.

### **o Past week's accomplishments**

- **Josh Dwight:** Researched Globus to see how we can implement a Single-Sign-On system into our website that would allow for students with an Iowa State account to easily log in to our system without needing to create an account separate from just their ISU account
- **Michael Geltz:** Prepped a suite of tasks to fast track dedicated server readiness when the department gets back to us with the server. Researched better practices when it comes to administrating a Linux server.

- Michael Becker: Over the summer specifically researched different ways to implement security practices within our web application. My research specifically involves sanitization of inputs from users at most points. This would defend attacks along the lines of XSS. Have also been looking into “spring security” as well as event logging. These would provide real time health checks using “springboot actuator.”
  - Matt Gudenkauf: Researched ways to implement the more advanced features we were talking about from last semester such as SSO and live screen sharing. In the meantime while we wait for our server to go online I’ve added to our git lab issue board and assigned tasks to myself that will be completed when the server is back on.
  - Logan Pfantz: Researched and experimented with different project management techniques. Currently working to implement milestones into the team’s workflow to improve productivity. Created several issues on the github site for the team to coordinate jobs easier.
  - Ryan Lin: Researched continuous integration pipelines with GitLab CI/CD to automatically run our test suites whenever code is pushed. Looked into integrating JUnit and Selenium tests so both backend and frontend checks run in parallel. Experimented with setting up coverage reports and automated deployment steps to make sure changes are tested before merging into the main branch.
- o **Pending issues** *(If applicable: Were there any unexpected complications? Please elaborate.)*
- Josh Dwight: N/A
  - Michael Geltz: N/A
  - Michael Becker: N/A
  - Matt Gudenkauf: N/A
  - Logan Pfantz: N/A
  - Ryan Lin: N/A
  - Everyone: We need to get our server back up and running since it was taken down over the summer even though we asked for it to be permanent

**Individual contributions** (Creating this section is optional, but it is **Required to include the “Hours Worked for the Week” and their “Total Cumulative Hours” for the project for each member somewhere relevant in your report. Your individual weekly hours should be at a minimum of 6-8 hours for this course. So please manage your time well. Also, ensure that individual contributions support your claim to the weekly hours. Be honest with the reports.**)

<u>NAME</u>	<u>Individual Contributions</u> (Quick list of contributions. This should be short.)	<u>Hours this summer</u>	<u>HOURS cumulative</u>
Josh Dwight	Researched Globus and SSO systems in general	7	26 + 7 = 33
Michael Geltz	Dedicated server preparation. System admin research.	7	28 + 7 = 35
Michael Becker	researched different ways to implement security practices within our web application. My research specifically involves sanitization of inputs from users at most points. This would defend attacks along the lines of XSS. Have also been looking into “spring security” as well as event logging.	7	25 + 7=32
Matt Gudenkauf	Researched features for next semester Added more issues to issue board	7	29 + 7 =36
Logan Pfantz	Work on project management including planning. Create milestones and issues on gitlab.	7	33 + 7 = 40
Ryan Lin	Researched GitLab CI/CD for automated testing pipelines Looked into automated coverage reporting	7	26 + 7 = 33

- o **Plans for the upcoming week** (Please describe duties for the upcoming week for each member. What is(are) the task(s)?, Who will contribute to it? Be as concise as possible.)
- Josh Dwight: Since I did a bit of research into Globus over the summer, I am going to do some experimentation on a development branch in our repo to see if I can get anything happening with SSO stuff.
  - Michael Geltz: Get dedicated server back to a functional and stable state, including improvements researched.
  - Michael Becker: I plan to look into and implement features surrounding input sanitization as a starting point for defense against XSS attacks. Then the weeks after that I’ll focus on the springboot actuator and dive into more research there.
  - Matt Gudenkauf: I’m planning on adding more ideas to the issue boards. Also once the server is back up I plan to start implementing a way to view documents teachers upload
  - Logan Pfantz: Implement more project management ideas into this project. Finish setting up issues and milestones on gitlab. Work on creating better communication networks for the team. Select an issue to work on and implement the features.
  - Ryan Lin: Continue with implementing class materials such as uploading lectures

o **Summary of weekly advisor meeting** *(If applicable/optional)*

We discussed what our plans were regarding future collaboration and what we have learned from our faculty panel last semester. We also covered how development is stalled due to not having a dedicated server running.