Project Plan Presentation
Improved Peer Review in CourseLib

The Capstone Experience
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Project Sponsor Overview

• Michigan State University founded in 1855
• Computer Science program founded in 1965
• Department of Computer Science established in 1968
• Name changed to Department of Computer Science and Engineering in 1998
Project Functional Specifications

- CourseLib is currently in use by MSU CSE
- Allow dialog between reviewers and reviewees
- Enhance administrative controls
- Improve consistency of email notifications for reviewing assignments
Project Design Specifications

• Peer Review Assignment
  ▪ Reviewer/Reviewee Reassignment

• Peer Review System
  ▪ Reviewer/Reviewee Communication
  ▪ Submission Association
  ▪ Diagram Marking

• Email Notification System
  ▪ Missing Reviewee Assignment Notification
  ▪ Revised Email Logic
## Screen Mockup: Review Admin Page

<table>
<thead>
<tr>
<th>Name</th>
<th>User ID</th>
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Screen Mockup: Review Reminder Page
Screen Mockup: Student Reassignment
Screen Mockup: Review Chat

**Design Task**
- Class Animal
  - name: string
  - birthday: date
  - id: int
- Class Vaccine
  - name: string
  - administrationDate: date

**Review**
- **Reviewer:** You are missing several classes. For example, every Animal belongs to a Farm. In addition to this, each Vaccine should have a manufacturer. 7 hrs ago
- **You:** What other classes could I be missing? Also, besides the manufacturer do my member variables look correct? 2 hrs ago
- **Reviewer:** The other main class I can think of that you are missing is the Pharmacy class because each pharmacy in the system has vaccines. Your member variables seem good. 48 mins ago
- **You:** Thanks! I completely forgot about the Pharmacy's in the system. I'll add that right now!
Screen Mockup: Diagram Markup
Project Technical Specifications

• Highly modular educational framework
• PHP/MariaDB Backend
• Vue.js Frontend
• Prioritizing security through input sanitization
• PHPMailer email API
Project System Architecture
Project System Components

• Hardware Platforms
  ▪ MSU DECS Server
  ▪ SMTP Server

• Software Platforms / Technologies
  ▪ Frontend: HTML, CSS, Vue.js
  ▪ Backend: PHP, PHPMailer, MariaDB
  ▪ Docker
  ▪ Apache
Project Risks

• Email Notifications in PHP-Based System
  ▪ Sponsor indicated PHPMailer is prone to bugs
  ▪ Web research and sandbox environment

• Reviewer/Reviewee Administrative Controls
  ▪ Lack of infrastructure for manual data change/Bottleneck
  ▪ Create infrastructure as soon as possible

• Marking and Storing Data on Diagram Images
  ▪ Writing and saving data on top of image
  ▪ Develop a sandbox environment

• Reviewer/Reviewee Communication
  ▪ Handling real-time chat data
  ▪ Set up a sandbox environment
Questions?