

MICHIGAN STATE

U N I V E R S I T Y

Project Plan Presentation

Improved Peer Review in CourseLib

The Capstone Experience

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*From Students...
...to Professionals*

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

MICHIGAN STATE UNIVERSITY
CSE335 Course Console: Design 2 Reviewing

Home Main Grading Management

CSE335 Object-oriented Software Development FS22/730 Students Only

Design 2

Name	User ID	reviewee	reviewee	reviewer	reviewer
Abdur-Rahman, Muhammad	abdur145	⊗	⊗	kowal855/0	russellid/0
Bauer, Hans	baue3548	blitzer0/0	suzukii1/0	⊗	okwar333/0
Blitzer, Wolf	blitzer0	⊗	roeja897/0	baue3548/0	suzukii1/0
Cabrera, Miguel	cabrera3	goffjare/0	okwar333/0	chenli88/0	⊗
Chen, Li	chenli88	cabrera3/0	isaacjo8/0	abdur145/0	nayyarku/0
Doe, John	doejohn1	jackjack/0	larkin53/0	smit1352/0	zhao5639/0
Doumbouya, Sekou	doumbouy	kowal855/0	stepha99/0	jackjack/0	nagano01/0
Goff, Jared	goffjare	baue3548/0	suzukii1/0	cabrera3/0	okwar333/0
Isaac, Jonathan	isaacjo8	cabrera3/0	okwar333/0	chenli88/0	nayyarku/0
Jackson, Jackson	jackjack	doumbouy/0	nagano01/0	doejohn1/0	larkin53/0
Kowalski, Mateusz	kowal855	abdur145/0	russellid/0	doumbouy/0	stepha99/0
Larkin, Dvian	larkin53	jackjack/0	nagano01/0	doejohn1/0	zhao5639/0
Nagano, Makoto	nagano01	doumbouy/0	stepha99/0	jackjack/0	larkin53/0
Nayyar, Kunal	nayyarku	chenli88/0	isaacjo8/0	abdur145/0	russellid/0
Okwara, Romeo	okwar333	baue3548/0	goffjare/0	cabrera3/0	isaacjo8/0
Roe, Jane	roeja897	smit1352/0	zhao5639/0	blitzer0/0	suzukii1/0
Russell, D'Angelo	russellid	abdur145/0	nayyarku/0	kowal855/0	stepha99/0
Smith, John	smit1352	doejohn1/0	zhao5639/0	blitzer0/0	roeja897/0
Stephanopolous, George	stepha99	kowal855/0	russellid/0	doumbouy/0	nagano01/0



Screen Mockup: Review Reminder Page

MICHIGAN STATE UNIVERSITY
CSE335 Course Console: Design 2 Reviewing

Home Main Grading Management
CSE335 Object-oriented Software Development FS22/730 Students Only

Design 2 Assign 2 Reviews Send Reminder

Name	User ID	reviewee	reviewee	reviewer	reviewer
Abdur-Rahman, Muhammad	abdur145	🕒	🕒	kowa855/0	russell0/0
Okwara, Romeo	okwar133	heue3548/0	offiare/0	cabrera3/0	isaacio8/0
Roe, Jarr	roea897	smit1352/0	zhao5639/0	blitzer0/0	suzuki1/0
Russell, D'Angelo	russell0	abdur145/0	nirvarku/0	kowa855/0	stepha99/0
Smith, John	smit1352	doejohn1/0	zhao5639/0	blitzer0/0	roea897/0
Stephanopoulos, George	stepha29	kowa855/0	russell0/0	doumbouy/0	naono01/0

Send Reminder

To: Class

Design 2 has been released! Complete the assignment to see your review assignments.



Screen Mockup: Student Reassignment

The screenshot shows a web browser window displaying the Michigan State University CSE335 Course Console. The page title is "CSE335 Course Console: Design 2 Reviewing". The navigation menu includes "Main", "Grading", and "Management". The current page is "CSE335 Object-oriented Software Development FS22/730" and is set to "Students Only".

The main content area features a "Design 2" dropdown menu, "Assign Reviews" and "Send Reminder" buttons, and a table of review assignments. A modal window is open over the table, showing the details for "Abdur-Rahman, Muhammad".

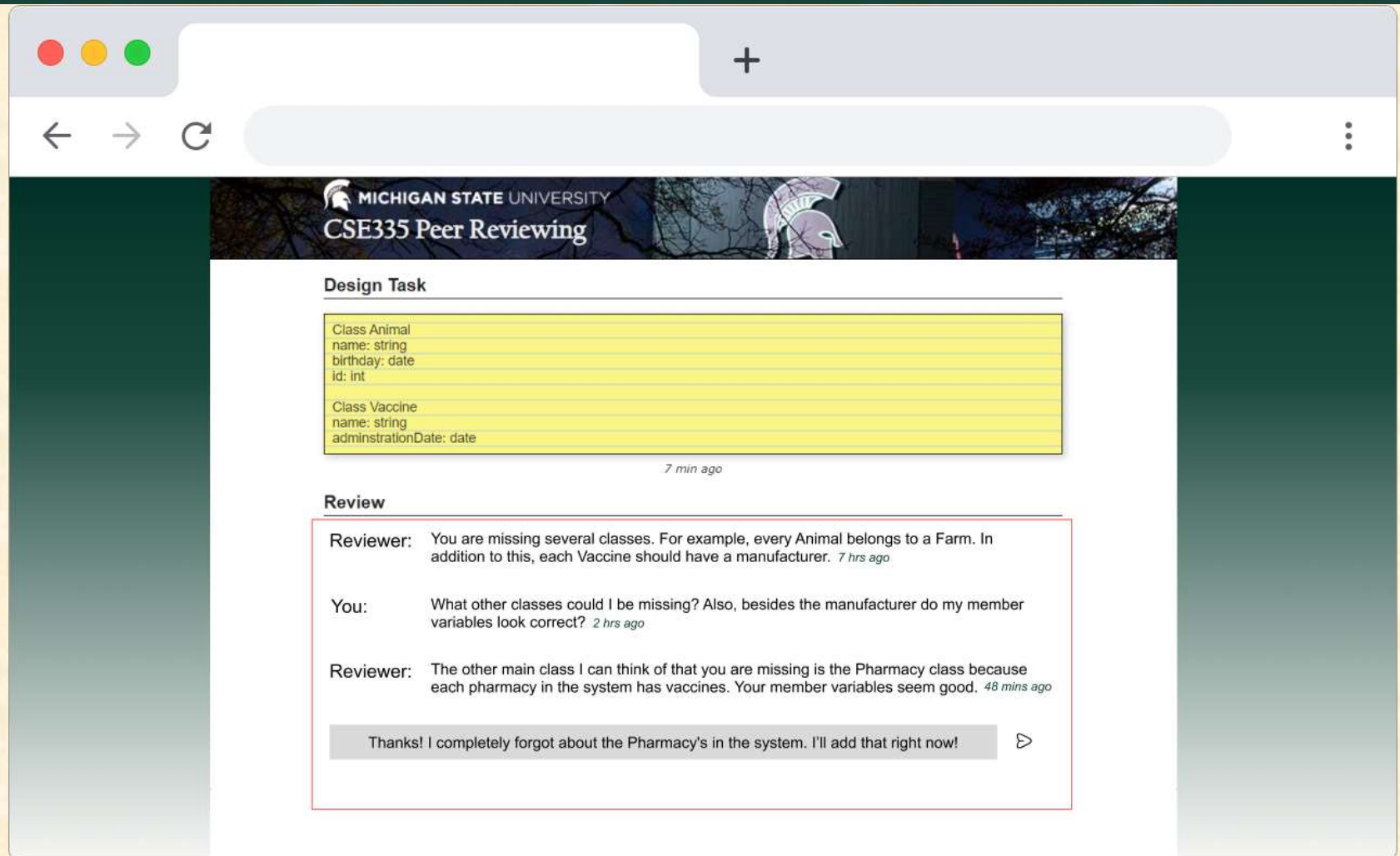
Name	User ID	reviewee	reviewee	reviewer	reviewer
Abdur-Rahman, Muhammad	abdur145	⊙	⊙	kowal855/0	russell8/0
Okwara, James	okwara333	bauer3548/0	poffjere/0	cabrera3/0	saacio6/0
Rice, Jane	roerja897	smit1152/0	zhao2639/0	blitzer0/0	suzuki11/0
Russell, D'Angelo	russell8	abdur145/0	nayyarku/0	kowal855/0	stepha99/0
Smith, John	smit1152	doejohn1/0	zhao5639/0	blitzer0/0	roerja897/0
Stephanopoulos, George	stepha99	kowal855/0	russell8/0	doumbouy/0	naqano01/0

The modal window for "Abdur-Rahman, Muhammad" contains the following elements:

- Reviewee: Unassigned (with a dropdown arrow)
- Send Reminder: A button with a right-pointing arrow.
- Message: "You have no reviewers for this assignment because of this the instructors will be performing your reviews."



Screen Mockup: Review Chat



Screen Mockup: Diagram Markup

The image shows a screen mockup of a web browser displaying a submission page for Michigan State University CSE335 Design 4. The page content is a UML class diagram for an art system. The diagram includes the following classes and relationships:

- Contest**: Attributes: year: int. Relationships: 1 Contest to * Categories (categories), 1 Contest to 1 Artist (contest).
- Categories**: Attributes: (none). Relationships: 1 Categories to * Category (categories).
- Category**: Attributes: prize: double. Relationships: 1 Category to * Art (pieces), 1 Category to * Reviews (reviews).
- Artist**: Attributes: name: string, phone: string, email: string. Relationships: * Artist to 1 Contest (artist).
- Art**: Attributes: title: string. Relationships: 1 Art to * Reviews (reviews).
- JuniorArtist**: Inherits from **Artist**.
- Abstract**: Inherits from **Category**.

Hand-drawn annotations on the diagram include:

- An orange circle around the **Categories** class with the label "CA" below it.
- A green circle around the **Art** class with the label "B" to its right.

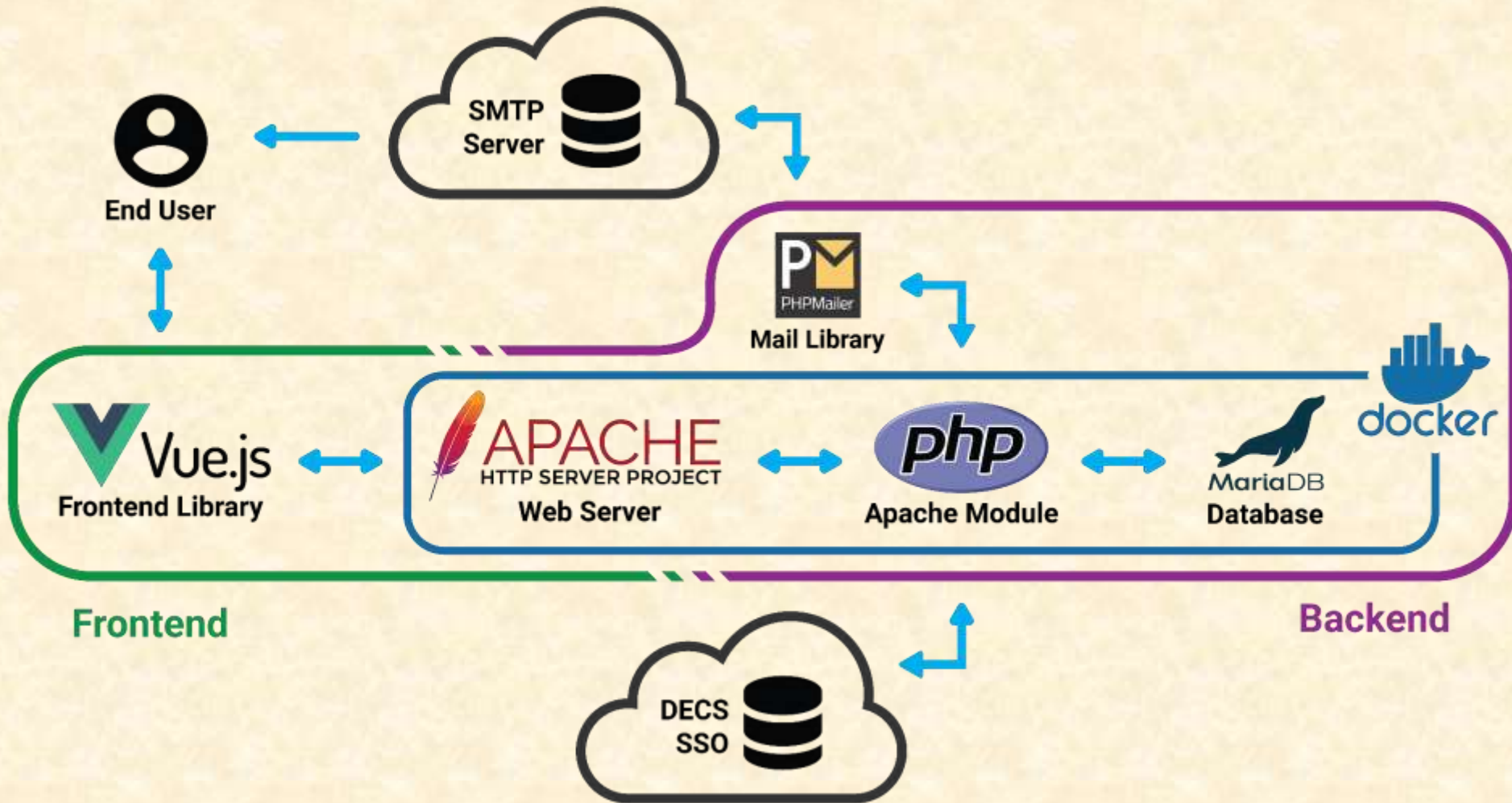


Project Technical Specifications

- 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?

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