

Game-Based Learning Activities and Assignments

Abstract

The Center for Innovation and Research in Computing (CIRC) is creating a web application that uses game-based learning to help students be engaged and collaborate, as an adventure-based quest.

In this research project, the activity module was created for this web application. This module contains assignment creation, completion, and grading. These assignments can be included in the quests and courses. The seamless connection between the activity module and the course module was possible with the Yii framework.

Methodology

Learn the Yii framework



Program the Activity module using



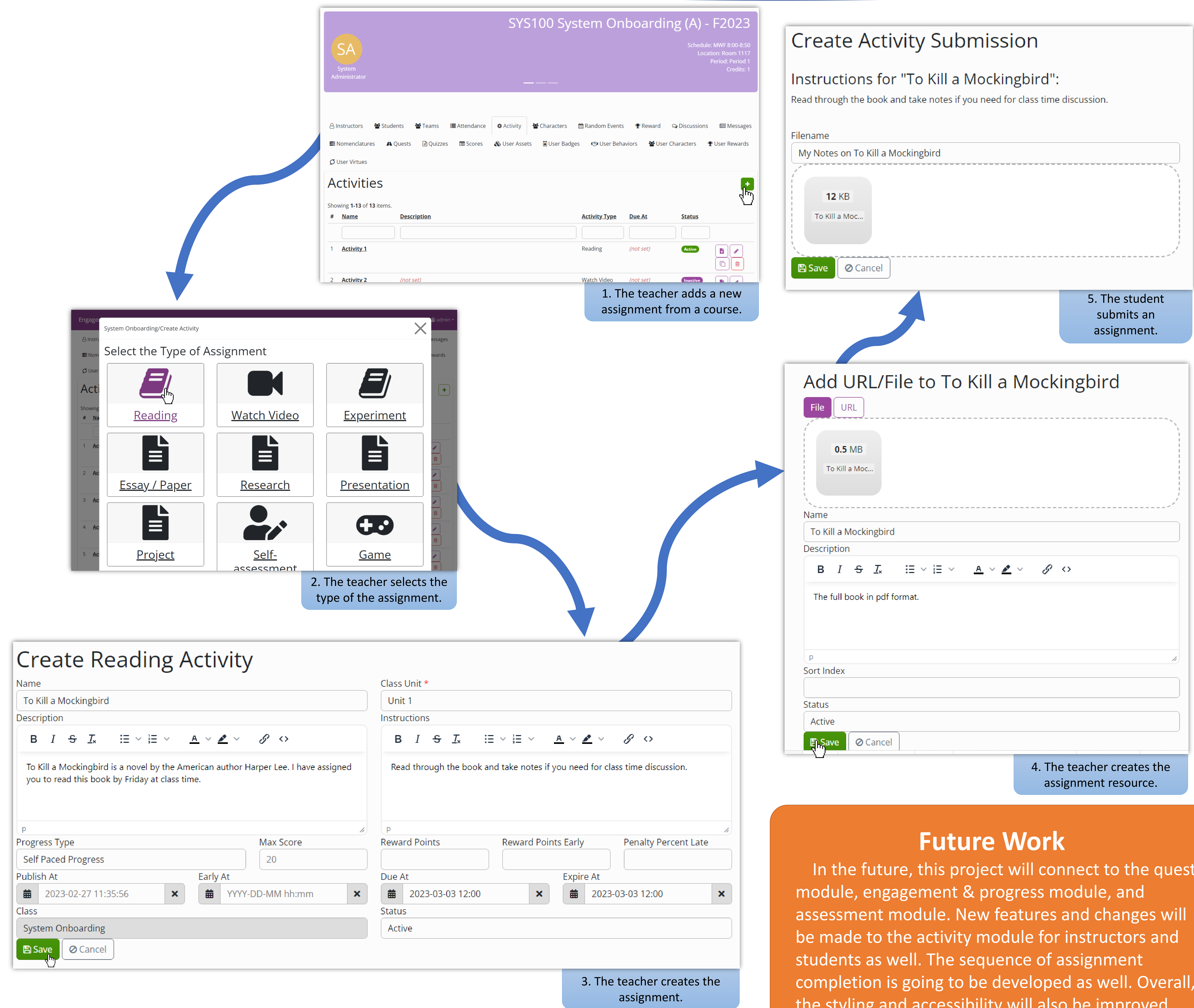
Improve the front-end by making it more appealing and user-friendly using PHP and Ajax



Connect the module to the course module within the Yii framework



Debug through log inspection and tracing



Future Work

In the future, this project will connect to the quest module, engagement & progress module, and assessment module. New features and changes will be made to the activity module for instructors and students as well. The sequence of assignment completion is going to be developed as well. Overall, the styling and accessibility will also be improved.