

Team 2 Project Charter

Educational Programming Through Interactive Media

Team Members:

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Problem Statement:

In current society, there is a high demand for Science, Technology, Engineering and Mathematics (STEM) specialists, especially Computer Scientists. To meet this need, there is currently a demand in the education world for tools to teach basic programming concepts and logical reasoning in a way that engages students, maintains their interest, and provides positive reinforcement.

Project Objectives:

The objectives of the project are:

- Design game mechanics that will develop the following:
 - Critical thinking, logic, and programming skills
- Develop a visually attractive web application using Ruby on Rails
- Create the required web services and databases for the application
- Transfer the application to Phil Sands to aid him as he inspires students to pursue Computer Science through his outreach program
- Provide training and support to Phil Sands

Stakeholders:

The stakeholders of this project will be:

- The Purdue Computer Science Outreach program run by Phil Sands
- Students that will be taught by Mr. Sands
- Students outside of the outreach program using the app to learn computer science
- The developers working on the project

Project Deliverables:

An engaging web based role playing adventure game that develops computer science skills will be created. The deliverables will consist of:

- A web-based front-end app using Ruby on Rails, HTML, and JavaScript
- A web-based admin app for instructors using Ruby on Rails, HTML and JavaScript
- A database for tracking user actions and other information for the application
- A web service for checking and running student code in an isolated sandbox

State Farm Project Owner: No.