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Title: CodingCareers

Description:

We would like to develop an browser-based interactive single player coding game for children ages 11-14. Our goal is to expose children to an introduction to programming in python as well as the opportunities coding has to offer. We will have different levels that the player can reach with different careers on each level. We plan on rotating between an interactive lesson plan and real-world problem solving. Level one, for example, would be a tutorial in python printing "Hello World". The next level would involve a hospital or otherwise healthcare related theme to show that computer scientists have a part to play in that field.

Platform/Environment: GWT (Google Web Toolkit)

Programming Languages:

Language	Lauren	Peilun	Alan	Ian	Taylor
Java	Intermediate	Beginner	Intermediate	Expert	Expert
HTML	Beginner	Intermediate	Beginner	Intermediate	Expert
CSS	Beginner	Beginner	Beginner	Intermediate	Intermediate
JavaScript	Beginner	Beginner	Intermediate	Expert	Beginner
SQL	Beginner	Beginner	Beginner	Intermediate	Intermediate
Python	Expert	Expert	Expert	Guru	Guru
Google Search	Guru	Intermediate	Expert	Expert	Expert

Functionality:

- Interactive computer game
- Minimum two levels, a tutorial level and a healthcare themed level
- Describe applications of computer science in different fields
- Users can log in
- Logging in saves user progress
- Teach Python in an understandable way
- Each level displays a unique job-themed environment
- User can select from set of commands to interact with the environment
- Completing levels gives reward/achievements

Stretch Functionality:

- Create a character
- More interactive environment like other characters
- Add more levels: security, NASA, banking, tech company
- Teach an additional language e.g. Java, C++