

# An Interactive tutor for JavaScript programming

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# Project Outline

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## **Objective**

To create a piece of interactive teaching software for JavaScript programming.

## **Aims**

Research existing work in the field of electronic learning to influence my approach for this project.

Develop and apply knowledge of programming techniques to produce a robust application.

Explore programming languages have the most potential to create both an aesthetical and functional program.

## **My Thoughts**

The idea of “Interactive teaching software” was interesting, however, I felt that I was more confident taking on the task of teaching Java instead of JavaScript.

Project provided consolidation of entire university understanding.

# Initial Ideas

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## My Requirements

**Focus of application:** Feasible idea.

**Aspect of challenge:** Teaching a comfortable language using unfamiliar languages.

**Chosen idea:** Focus on a re-usable concept on a small scale.

**Main element:** Visually demanding.

# Available Resources

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## Languages and Libraries

Java

JavaScript

JQuery & JQuery UI

HTML

MySQL (Mudfoot server)

Gson

## Research Approach (Important factors)

Synchronous or Asynchronous

Multimedia, Contiguity, Modality, Redundancy, Coherence, Personalization, Segmenting

# Demonstration

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Here is (hopefully) the working application.

# Re-usability of application and concept

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## **Dynamic project**

Element of re-usability and control.

## **Simplicity**

Target audience.

## **Clean and organised**

Principles and research

# Problems and potential changes

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## CSS

Most frustrating computing concept I have encountered.

## Importing database

Table/List display. Comparing answers.

## Customised feedback

Integration of a compiler. Question detail limitations.

## CSS

I cannot express that enough.



# Results

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## **Design Influenced from research**

Design Principles – Richard E. Mayer

## **Incorporated assignment techniques**

Appropriate for my chosen approach

## **Incorporated assignment techniques**

Potential testing and evaluation options



# Conclusion

## Combination of programming languages

Experience using a variety.

## Summary of education

Evidence of progress.

## Understanding teaching process

How much thought goes into it.

Thanks for listening, I look forward to the questions...

