

UNIVERSITY OF GLAMORGAN

FINAL YEAR PROJECT

Literature Review

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Abstract

Motivation

Learning programming was not an easy task whilst I was in secondary education. Simply because we were being taught how to use software rather than how to create it.

The main focus of this project is to provide a tool that can help children and young adults begin to understand the fundamental concepts of developing software in a fun and intuitive environment.

Problem Statement :

Recently it has been realized there is a distinct lack of knowledge regarding computer sciences in secondary education.

The world of technology revolves around the expertise of computer scientists and as the growth of mobile platforms has increased it has never been more important to sustain children's interest in computing . The ICT curriculum has been labelled harmful , boring and or irrelevant e-Skills (2008). Therefore ICT course has been scrapped and replaced with Computer Science in the hope that this new curriculum will provide students with the skills employers require. Department of Education (2012)

I feel that there is a need for a tool that helps children learn about how software is produced and provides an interactive way to help get them inspired and hopefully developing their own software.

// Will be filled in when the document is near completion. Approach :

Results :

Conclusions :

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Contents

0.1	Why Computer Programming	3
0.1.1	Programming Languages for Children	4
0.1.2	National Curriculum	5
0.2	Effective Learning styles	6
0.3	Graphical User Interfaces	7
0.3.1	Good Practices	7
0.3.2	Accessability	7
0.4	Software Construction	8
0.4.1	Programming Languages	8
0.5	Networking	9
0.5.1	Methodology's	9
0.6	Similar Applications	10
0.7	References	11

0.1 Why Computer Programming

0.1.1 Programming Languages for Children

Why I am using python and other languages. Why they are suitable ? Why aren't the suitable ? Decisions made?

0.1.2 National Curriculum

Current state of affairs regarding the National Curriculum and Computing?
Why this will affect my project?

0.2 Effective Learning styles

Learning Modalities Visual Auditory Kinesthetic

0.3 Graphical User Interfaces

0.3.1 Good Practices

0.3.2 Accessibility

Ethical Considerations Professional Practice

0.4 Software Construction

How the software will be constructed?

0.4.1 Programming Languages

What requirements of the programming language do I need ? What programming languages suit the nature of the problem? Why are they good? Why are they Bad? What impact on the project does this have?

Why I have chosen the language that I have?

0.5 Networking

0.5.1 Methodology's

TCP/IP UDP Sockets Others etc ..

0.6 Similar Applications

0.7 References