**Project ID: 140**

**Supervisor: Professor Richard Mitchell**



Final Year REPORT

Interactive web pages to learn coding



**Author: Mehmet Memz Karakus**

**Student Number: 21008251**

**Module: CS3IP16**

**Date: 20th April 2016**

Contents

[Abstract 2](#_Toc475555823)

[Acknowledgment 2](#_Toc475555824)

[Glossary of terms and abbreviations 2](#_Toc475555825)

[Introduction 2](#_Toc475555826)

[Problem articulations and Specification 3](#_Toc475555827)

[Problem Statement Stakeholders Technical objective Constraints Assumptions User Acceptance Criteria 3](#_Toc475555828)

[Literature Review 4](#_Toc475555829)

[HTML 4](#_Toc475555830)

[CSS 4](#_Toc475555831)

[BOOTSTRAP 4](#_Toc475555832)

[JAVASCRIPT 4](#_Toc475555833)

[PHYTHON 4](#_Toc475555834)

[The solution approach 4](#_Toc475555835)

[Potential Solutions Chosen Solution Definition of solution approach 4](#_Toc475555836)

[Design and Implementation 4](#_Toc475555837)

[Design User Interface 4](#_Toc475555838)

[Website approach design 4](#_Toc475555839)

[Use of codes 4](#_Toc475555840)

[Testing verification and validation 4](#_Toc475555841)

[Approach Limitations Device Test Pages Database 4](#_Toc475555842)

[Final 4](#_Toc475555843)

[Discussion 4](#_Toc475555844)

[Conclusion 5](#_Toc475555845)

[Project Commentary 5](#_Toc475555846)

[Social, Legal, Health and Safety Ethical Issues 5](#_Toc475555847)

[Reflection 5](#_Toc475555848)

[Reference 5](#_Toc475555849)

[Appendices 5](#_Toc475555850)

Evaluation

# Abstract

This interactive website is created to teach people to do coding in different languages. The website mainly created using bootstrap however implementation of edited CSS for the layout is also created while making the website. In order to navigate between pages a link and a button is created that specifically directs the user on clicked link. Furthermore, Photoshop images are created for carousal of the website and to make sure that high quality image is entered on to the system. The logo has also been created using Photoshop using special tools by the program. The website mainly focused on teaching its users Python coding language however the website includes few implementation of the JavaScript and brief description of HTML. The main target of the website is to make the website user friendly and interactive so the users can understand and learn by inserting codes into the site. The Python tutorials give user the flexibility of understanding and implementing the code in the system by using the code editor provided in each tutorial as well as to have an option to edit the code and run it again to have better understanding. This report will provide a detailed account of the creation of the website from the research stage through the implantation, testing and overall outcome of the project.

## Acknowledgment

I would like to express my deep gratitude to those who have directed me to get the current academic life path.

* My supervisor Professor Richard Mitchell for academic guidance and support as well as his very helpful and understanding personality.
* My honourable friend Doctor Omer Farukhan Gunes from University of Oxford, for sharing his valuable experience and knowledge throughout his life.
* My mom Gulbahar Karakus for waking me up every morning for the past three years so I can get this degree.
* My brother Serif Karakus for not playing video games on weekends to not disturb me while I study.
* To all my managers for giving me day of when I need for university.

## Glossary of terms and abbreviations

|  |  |
| --- | --- |
| **Term** | **Definition** |
| Website | The main project is on this which can be accessible on any internet enables devices. |
|  |  |
|  |  |
|  |  |
| Python | A programming language |
|  |  |
| JavaScript | A programming language |
|  |  |
| CSS | Layout of the page |
|  |  |
|  | Moving image which directs users to different page. |
|  |  |
| Carousal |  |
|  |  |

## Introduction

The computing has become important aspect of people lives for many years. Rapid grow in recent years in easier communication by computer has made a great change in business and people lives. However, it is important to understand the fundamental reasons on why people can communicate using computer and how those programs are created so people can use the computer and create specific programs. For this reason, a website is created to explain and interact with the page which will enable people to learn coding.

The main target of the website is to teach people how to code. User will be able to interact between different web pages. And be able to see and understand different coding languages. The website mainly focuses on Python programming language however simple understanding of JavaScript and HTML is also included in the website.

This report will provide an in-depth description of the project process as well as clear understanding on how we have reached to the final version of the project by following set of requirements within the specification.

The main aim of the project is to make sure that the code editor is run correctly This project aims to implement a fully functional chess game on a mobile platform and explore a way in which computation can advance the functionality and subsequently enhance the playing experience the user encounters when playing against the computer.

# Problem articulations and Specification

The website requires internet connection and can be accessed through any network enabled device. User can access either mobile version or desktop version the browser will automatically detect and view the page in desired form. User will be able to copy paste the work or click on a button which enables to run the program. The user will also be able to edit any codes that are inserted inside the site by changing the appropriate text on the website however it must support network features in order to run the tutorials.

## Problem Statement

The main stakeholders are stated below. Stakeholders are clearly included in the project so that their need can properly implemented in the project.

**Developer (Mehmet Memz Karakus)**

The developer will create the whole site and include any specification listed in 3.3 of this project. **The developer is responsible for the end-to-end solution for this project as created to meet the technical specification in section 3.3.**

The developer must make sure that delivered website is functioning appropriately without any issues as well as well as updating and providing enough information for users to understand the functionality and do answer any issues.

**The developer is primarily concerned with providing a solution to the problem statement above and ensuring quality and completeness throughout the development lifecycle.**

**Project Supervisor (Professor Richard Mitchell)**

The project supervisor will guide the developer throughout the project. The supervisor will also have close connection with the developer and to see if he is processing well. The meetings will be held on Thursdays and will last anything from fifteen minutes to plus. It is important to demonstrate what you have done in project because supervisor will not only guide you but also will give you a feedback as a user so it is important to understand the supervisor feedback and reflect it on to the create it website to have better results.

**User –**

The users will be whoever entering the website to use and learn programing languages provided within the website so it can potentially be anyone from anywhere around the world.

## Stakeholders

The main stakeholders are stated below. Stakeholders are clearly included in the project so that their need can properly implemented in the project.

**Developer (Mehmet Memz Karakus)**

The developer will create the whole site and include any specification listed in 3.3 of this project. **The developer is responsible for the end-to-end solution for this project as created to meet the technical specification in section 3.3.**

The developer must make sure that delivered website is functioning appropriately without any issues as well as well as updating and providing enough information for users to understand the functionality and do answer any issues.

**The developer is primarily concerned with providing a solution to the problem statement above and ensuring quality and completeness throughout the development lifecycle.**

**Project Supervisor (Professor Richard Mitchell)**

The project supervisor will guide the developer throughout the project. The supervisor will also have close connection with the developer and to see if he is processing well. The meetings will be held on Thursdays and will last anything from fifteen minutes to plus. It is important to demonstrate what you have done in project because supervisor will not only guide you but also will give you a feedback as a user so it is important to understand the supervisor feedback and reflect it on to the create it website to have better results.

**User –**

The users will be whoever entering the website to use and learn programing languages provided within the website so it can potentially be anyone from anywhere around the world.

## Technical objective

The following technical objectives are to be satisfied by completion of the project.

1. This project will produce a website that will teach people how to do coding.
2. The website is responsive and it can be accessed through variety of devices.
3. The website allows user to insert their own codes to expand their learning.
4. The user can navigate between the pages without any issues.
5. The website will give example of each tutorials to help user understand the content.
6. The website will allow user to message the owner of the website for any additional comments.
7. The website can be accessible at all times.
8. The user can take a quiz to test their understanding and go back to content if it isn’t clear.
9. The user will be able to insert value or text into the editor section to function some codes.

## Constraints

The following constraints are to be considered in the attempts to meet the technical objectives for this project.

1. The performance of the website will depend on network connection.
2. The website will not work without network connection.
3. **BOLD CAN CONTINUE**

## Assumptions

The following assumptions are to be considered in the attempts to meet the technical objectives for this project.

1. The website can be accessed and edited by all devices with network connection.
2. The JavaScript, PHP and HTML are accepted by user device.
3. It will always be available for access through its domain address.

## User Acceptance Criteria

The following acceptance requirements describe the conditions which must be met before the project solution can be deemed as satisfying the problem statement.

# Literature Review

## HTML

## CSS

## BOOTSTRAP

## JAVASCRIPT

## PHYTHON

## The solution approach

## Potential Solutions Chosen Solution Definition of solution approach

# Design and Implementation

## Design User Interface

## Website approach design

## Use of codes

# Testing verification and validation

## Approach Limitations Device Test Pages Database

# 

# Final

## Discussion

## Conclusion

## Project Commentary

## Social, Legal, Health and Safety Ethical Issues

## Reflection

## Reference

## Appendices

## 