**New Zealand Diploma in Information Systems**

**HTCS5607 IS Application Project**

**TECHNICAL REPORT TEMPLATE**

**Project Name: NZ HORSE RACING**

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| --- | --- | --- | --- |
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**Client Stakeholders**

|  |  |  |
| --- | --- | --- |
| **Client Stakeholders** | **Full name and title** | **Contact details** |
| **Project Sponsor(s)** | *Lei Song, Simon Dacey* | *[phone, email]* |
| ***[add other roles as appropriate]*** | *[full name and title]* | *[phone, email]* |

**DATE OF SUBMISSION**

*dd/mm/yyyy*

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# 1. Document Control

## 1.1 Version History

This document has had the following revisions:

| **Version** | **Date** | **Author** | **Description of Change** |
| --- | --- | --- | --- |
| 0.1 |  |  | Initial draft |

## 1.2 Contribution to Report sections

| **Project Team Member name** | **Student ID** | **Report Section** |
| --- | --- | --- |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

## 1.3 Glossary

To provide clarity, terms and acronyms used in this document are defined as follows:

| **Term / Abbreviation** | **Definition** |
| --- | --- |
| Supervisor | Technical Advisor |
|  |  |

# 2. Executive Summary

# 3. Introduction

# 4. Technology Review

Design a system for NZ HORSE RACING. Programs that were recommending to create C# needed for the Graphic User Interface are:

-**Monodevelop:** Monodevelop enables users to quickly write desktop and web applications for Linux, windows and mac OS. Also makes it easy for developers to port .NET applications created with Visual Studio. (Monodevelop Reviews, n.d.)

-**Rider:** Rider develops a range of applications on Windows Linux and Mac and provides outstanding editing support and code insight for languages used in .NET development which includes C#. (Rider Reviews, n.d.)

-**Eclipse aCute:** Eclipse aCute is one of the newest projects which provides development in C# and .NET. It’s a fun tool to use and provides a range of editing for C# (Bullen, n.d.)

-**Scriptcs:** Scriptcs is easy to use and run with a simple text editor. It is a new program and uses NuGet to manage dependencies. It allows you to write and run an application with one line of code. Also you can download script packages which helps reduce coding. (Cady, n.d.)

-**Visual Studio Code:** Visual Studio has around 14+ million users (Tung, 2021) and is popular with the the coding community. It is a easy to use program and comes with many benefits and is customizable.

Visual Studio Code will be the program will be using to produce the coding for the database as its easy to use and develops coding quite easily.

Programs recommended for Designing the Database for NZ HORSE RACING are:

-**Knack:** Knack is an easy to use database tool. They are a SaaS(Software as a Service) online tool that allows users to easily structure, connect and extend data with no coding required. Also has a impressive customer base. (Enfroy, 2021)

-**Improvado:** Improvado offers integration with third party tools which includes Google Awards, Excel and Facebook. It has a robust reporting mechanism and reduces manual reports by 90 percent. It has the ability to migrate data and duplicate the online database instantly. (Enfroy, 2021)

-**Microsoft SQL Server:** Microsoft SQL is one of the most effective and desired database software. Has Excellent performance, improved query Processing and automatic plan correction. Easy to setup a database from the start and is capable to create several tables, designs and view data without syntax (Enfroy, 2021)

-**MySQL:** MySQL is open source database program and is popular due to the host providers adding it to there basic packages. It has good scalability and security, and is easily applicable. Offeres better data recovery, flexibility due to it being open source and has a low cost structure. (Enfroy, 2021)

-**Microsoft Access:** Microsoft Access is a good program which is suited for small to medium businesses. Easy to use. Widely used software due to its simplicity. Can easily import and compile data from different sources and can be linked directly to other Microsoft applications. (Enfroy, 2021)

For the database, we will be using Microsoft access as it’s a simple relation database software and is easy to setup tables and forms using data.

# 5. IT Methodology

# 6. Project Management

## 6.1 Project Management Narrative

*Details with evidence how the development of the project followed the selected systems development lifecycle*

## 6.2 Project Plan with Milestones

*Include an overall plan here and attach a detailed GANTT chart to the appendices*

## 6.3 Project Governance Responsibilities

*Explain who was responsible for project management and quality assurance, and explain how these tasks were carried out*

## 6.4 Project Meetings

*Include a schedule of your meetings (date, duration, participants, and type) and attach the minutes of each meeting to the appendices*

## 6.5 Project Reports

*Discuss the project status reports and attach your project status reports to the appendices*

## 6.6 Project Risk and Issue Analysis

*Discuss project risks and issues and attach your project risk and issue register to the appendices*

# 7. Requirements Analysis

## 7.1 Introduction

## 7.2 Use Case Diagram

## 7.3 Business Use Case Narratives (Descriptions)

## 7.4 Activity Diagrams

## 7.5 Overall Class Diagram

# 8. Project Design

## 8.1 Introduction

## 8.2 Software List

## 8.3 Version Control Software

## 8.4 Design Use Case Narratives (Descriptions)

## 8.5 Sequence Diagrams

## 8.6 Deployment Diagram

## 8.7 Database Design

*Include ERD and data dictionary*

## 8.8 Annotated User Interface Designs

## 8.9 Test Plan

# 9. Project Training

## 9.1 End User Background and Training Objectives

## 9.2 Training Materials

## 9.3 Training Deliverables

## 9.4 Evaluation

# 10. Conclusion & Lessons Learned

# References

# Appendices