



University
of Glasgow | School of
Computing Science

Team V - How Not To Kill Your Dog

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Abstract

This project aims to produce a learning application to be used within the University of Glasgow School of Veterinary Medicine by students wishing to revise and test their knowledge. The Django Web Framework was used to produce a web based application that is hosted in the veterinary school. It consists of both teaching slides with course content and affiliated questions. There is also administration functionality to allow the course co-ordinator to edit the content of the application to evolve with the prescribed course content.

Education Use Consent

We hereby give our permission for this project to be shown to other University of Glasgow students and to be distributed in an electronic format. **Please note that you are under no obligation to sign this declaration, but doing so would help future students.**

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Contents

1	Introduction	3
1.1	Motivation	3
1.2	Project Aim	3
1.3	Dissertation Outline	4

Chapter 1

Introduction

1.1 Motivation

Team V is comprised of five students currently in their third year of a Computing Science degree at the University of Glasgow. The team will be working for 7 months on this project which is the sole piece of coursework for the Team Project 3 course. By the end of this period of time it is hoped that there will be a fully functional piece of software that can be delivered to our client.

This project is “How not to kill your dog” a macabre title for our veterinary student revision program. Our client is Dr Fiona Dowell, a senior lecturer at the University of Glasgow’s Veterinary School. In addition to our client there are several more stakeholders for this application: the veterinary students who will be using this application throughout their studies; other lecturers and finally I.T. support staff who will interact with this application extensively. Dr Dowell found that her students struggle with learning how to do drug calculations more than they do with any other part of their course. She came up with the idea of having an application available to veterinary students to help enhance their drug calculation skills.

Dr Dowell believes that students will find it more entertaining to have a game-like learning application, which they could use in their free time to entertain themselves, but also learn and become better with their drug calculations. She would therefore like a program that can be used as a revision aid for students which she can add her own educational slides to and create tests and questions to engage students.

The motivation for developing this software was to bring all the education resources currently in use and create a more centralised location. Currently the client simply uses PowerPoint slides filled with information which her students can download from their respective Moodle site. Using our software would allow the user to forgo the need for specific software to read .ppt extension files and reduce compatibility issues. Also users do a lot of calculations and all tests with pen and paper; with new software it would be hoped that calculations could be performed online which would automatically compare them and tests would be submitted online for marking. This would result in faster and more efficient work for both students and lecturers. Dr Dowell also considered the possibility of promoting this application outside of the veterinary school in hopes of further enhancing the reputation of the University of Glasgow.

1.2 Project Aim

The aim of the project was to create a learning application for veterinary students that allows them to learn new content and revise and refresh existing knowledge. As this project has been heavily client dependant the team has had several meetings with Dr Dowell to ensure that high quality software that meets her requirements has been produced.

Through this process we have identified these aims for the project:

- To centralise existing revision material.
- Provide a system students can use to learn and revise course content.
- Provide a system which can include informal test material to assure students of their knowledge.
- Allow the evolution of the application content to match course content through the adding, deleting and editing of topic slides and questions.
- Make the learning process engaging and enjoyable for users.

1.3 Dissertation Outline

The dissertation outlines in detail the process of carrying out the “How Not To Kill Your Dog” project. Below is an outline of our report:

Chapter 2 discusses existing applications and similar revision tools which we found useful in the design process.

Chapter (Requirements) discusses the requirements gathering process and outlines the functional and non-functional requirements for our application.

Chapter (Design) discusses the general design of the application.

Chapter (Implementation) discusses the implementation of the project.

Chapter (Testing)

Chapter (Evaluation)