



University
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Computing Science

Team V - How Not To Kill Your Dog

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Chapter 1

Requirements

This section discusses the requirements elicitation process for our project. As we have an external-client, this process is important to ensure that we identify all requirements to produce the application that fully meets their needs.

1.1 Client Interview

The project was proposed by Dr Fiona Dowell, a senior lecturer at the University of Glasgow School of Veterinary Medicine. Initially, we met with Dr Fiona Dowell in order to gain more information about the requirements and specification for the application to ensure that we produced an application relevant to what the client wanted.

Our initial requirements for the vet application were :

- A learning application for vet students, providing step-by-step tutorials for different sections of the vet course.
- Simple example questions within each topic to test how much the user is learning about that specific section.
- A larger assessment at the end of all sections to test users on all the content within the application.

After the initial meeting with our client, we thought that it would be useful for the content within the application to be able to be updated , for example if the content changed; to fix errors or update to include different questions. We presented this idea to the client who agreed that this would be a useful feature as it might be good to be able to update after some user feedback. The functional requirements were then updated to include an administration system.

The administration system allows admin staff to upload and remove topics. It also allows the content of each topic to be updated, slides and questions can be added and removed.

1.2 Functional Requirements

1.2.1 Requirements Table

Student - Uses the application to browse through the different topics, answering the sample questions as they go along and completing the assessment at the end of all topics.

User Admin - Responsible for adding new users to the system, setting their permissions to determine their access levels and deleting them when necessary.

Content Admin - Responsible for adding new topics, slides and questions to the system, and ensuring that all content is kept up to date with the course content.

Student

Id	Requirement
SR1	View Topic
SR2	View Slides
SR3	View Questions
SR4	Answer Questions

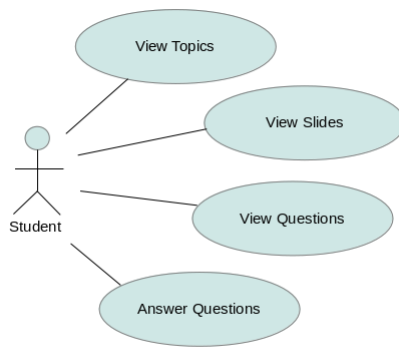
User Admin

Id	Requirement
UAR1	Add User
UAR2	Delete User
UAR3	Set Permissions

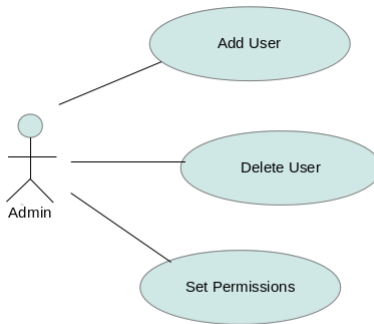
Content Admin

Id	Requirement
CAR1	Add Topic
CAR2	Edit Topic
CAR3	Delete Topic
CAR4	Add Slide
CAR5	Delete Slide
CAR6	Add Questions
CAR7	Edit Questions
CAR8	Delete Questions

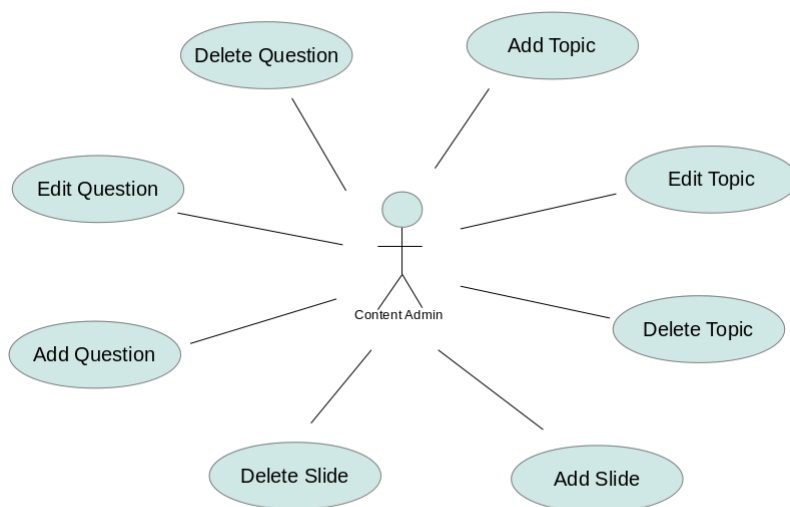
1.2.2 Use Case Diagrams



Student



User Admin



1.2.3 Student Requirement Details

SR1: View Topics

Description: Users must be able to view the different topics in the application.

Rationale: The students must be able to view the different topics in the application. This will allow them to navigate through the different topics as the progress through the slides and topics.

Priority: Must Have

SR2: View Slides

Description: Users must be able to view the different slides in the application.

Rationale: The students must be able to view the different slides in the learning application. The student will be able to navigate back and forward through the different slides of a topic and read through the content on each page.

Priority: Must Have

SR3: View Questions

Description: Users must be able to view the different questions in the application.

Rationale: The student must be able to view the questions in the application. This will allow the students to go through the different questions related to the information given in the slides.

Priority: Must Have

SR4: Answer Questions

Description: Users must be able to answer the questions in the application.

Rationale: The student must be able to answer the questions in the learning application. This will allow the students to test the knowledge they learned from the information provided in the slides.

Priority: Must Have

Dependencies: SR3

1.2.4 User Admin Requirements Details

UAR1: Add User

Description: The admin user must be able to add a user.

Rationale: The admin users must be able to create a new user account to allow other users to use the application and have access to the content management.

Priority: Must have

UAR2: Delete User

Description: The admin user should be able to delete a user.

Rationale: The admin user should be able to remove users from the system, meaning that they will no longer be able to login or have access to any of the content management.

Priority: Should have

Dependencies: UAR1

UAR3: Set Permission

Description: The admin user must be able to set user permissions.

Rationale: The admin user must be able to set user permissions in order to provide users with the appropriate access.

Priority: Must have

Dependencies: UAR1

1.2.5 Content Admin Requirements Details

CAR1: Add Topic

Description: The admin users must be able to add a new topic.

Rationale: The admin user must be able to create a new topic within the admin site.

Priority: Must have

CAR2: Edit Topic

Description: The admin users should be able to edit a current topic.

Rationale: The admin user should be able to edit a current topic for the application. This will allow the admin user to update the topic if its details change or are inaccurate.

Priority: Should Have

Dependencies: CAR1

CAR3: Delete Topic

Description: The admin users must be able to delete a current topic.

Rationale: The admin users must be able to remove a current topic from the application. This will mean that the topic will no longer be available within the application.

Priority: Must Have

Dependencies: CAR1

CAR4: Add Slide

Description: The admin users must be able to add a new slide.

Rationale: The admin users must be able to add new slides to the application. This will provide the content for the students to browse through.

Priority: Must Have

CA56: Delete Slide

Description: The admin users must be able to delete a slide.

Rationale: The admin users must be able to remove a slide from the application. This means that selected slide will no longer be available in the application.

Priority: Must have

Dependencies: CAR4

CAR6: Add Question

Description: The admin users must be able to add questions to the application.

Rationale: The admin users must be able to create new questions and add them to the application, allowing the students to test how much they have learned.

Priority: Must Have

CAR7: Edit Question

Description: The admin users should be able to edit questions.

Rationale: The admin users should be able to edit questions. The users should be able to update the questions to keep the questions up to date or to fix error.

Priority: Should Have

Dependencies: CAR6

CAR8: Delete Question

Description: The admin user must be able to delete questions.

Rationale: The admin user must be able to remove questions from the application. This will mean that the question is no longer available on the application for the students to view.

Priority: Must have

Dependencies: CAR6

1.3 Non-Functional Requirements

ID	Non-functional Requirement
NFR1	Availability
NFR2	Performance
NFR3	Educational
NFR4	Portability
NFR5	Concurrency

NFR1: Availability

As our application is a web-based application, it is important that users are able to access the application at all times, provided that the server it is running on is operational.

NFR2: Performance

Performance is an important part of the usability of our application. Our application should be able to load content from the database and display it within our application in a short amount of time. Failure to do so may result in the application being an inefficient and ineffective learning tool.

NFR3: Educational

The application should be educational to users, whether it be new information or revising the mate-

rial. Allowing the users to read through the slides and answer related questions should enhance the user's knowledge.

NFR4 : Portability

Having a web-based application means that our application is not restricted to a certain operating platform. This means that our application should be able to run on any platform without having to install additional software.

NFR5: Concurrency

As a study tool we know that many users will be accessing the software simultaneously when there are upcoming exams and tests. The application must therefore support concurrent user access to the system.