

# TECHNICAL DOCUMENTATION

## [Uni Compass]

TEAM: [Stu-Aid]  
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## History of technical documentation

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### Version history

Version	Date	Author	Description
1.0.0	15/10/24	All	Defining the requirements and system objectives and scope
1.1.0	18/10/24	Yana, Farah and Emma	-removed the helper because its a user -changed the last functional requirement -fixed the non functionals
1.2.0	08/11/24	All	-diagrams -Acceptance criteria
1.3.0	15/11/24	Yana, Farah and Emma	-Acceptance criteria
1.4.0	29/11/24	Yana, Farah and Nathan	-fixed the requirements -fixed acceptance criteria -fixed the user stories
1.4.1	5/12/24	Yana	-Finished the rest of the acceptance criteria that needed to be filled out

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# 1 Introduction

## 1.1 System Objectives

Aid students in technical university to get the help they need (people or direct answer). Through the use of the easy and intuitive interface.

## 1.2 System scope

This web system is aimed to be used by current or potential students of the Technical University of Sofia, but it would be publicly published, i.e. not restricted to others.

# 2 Requirements specification

## 2.1 System requirements

### 2.1.1 Functional requirements

No	Requirement	Priority
FR1	The user writes a response to a question on the forum.	2
FR2.	The system displays a searchable and categorized list of frequently asked questions (FAQs) with their corresponding answers.	5
FR3.	The user selects a preferred language from a list of available languages offered by the university.	6
FR4.	The user selects a faculty or department from a list of available options.	7
FR5.	The user posts questions on a forum.	1
FR6.	The user receives answers on the forum.	3
FR7	The user inserts their email in the designated area under the question.(possible contacts)	4
FR8.	The user selects their preferred language on the forum after the question is asked.	8
FR9.	The administrator has private access to the database.	9
FR10.	The administrator adds information of the faculties and departments	10
FR11.	The administrator adds information of the professors and secretaries.	11
FR12.	The administrator adds information for FAQs	12
FR13.	The administrator modifies the forum of the asked questions	13
FR14.	The administrator manages the forum of the received answers	14
FR15.	The administrator modifies the FAQs	15
FR16.	The administrator removes professors and secretaries that are no longer active	16
FR17.	The administrator removes questions that are no longer necessary	17
FR18.	An automated email is sent to users when their questions are answered.	18

### 2.1.2 Non-functional requirements

No	Requirement	Priority
NR1.	The web system shall ensure that all user requests are processed and responded to within a maximum of 2 seconds under normal operating conditions.	1
NR2.	The system should be easily accessible via the university's official website, ensuring single sign-on (SSO) integration or seamless access through the university portal.	6
NR3.	All user data must be stored securely following GDPR guidelines.	3
NR4.	All emails sent (including notifications) must be sent over encrypted channels (using secure SMTP).	8
NR5.	Error handling should provide helpful messages in case of issues, and logging critical errors for the system administrator.	10
NR6.	The website must comply with <b>ISO/IEC 27001</b> standards for information security management.	5
NR7.	The interface shall be intuitive, allowing users to navigate through the dropdown menus with no more than three clicks to reach their desired course.	9
NR8.	The system shall comply with WCAG 2.1 accessibility standards, providing features like keyboard navigation and screen reader compatibility	7
NR9.	The system shall achieve a minimum uptime of 99.9% and must recover from failures within 5 minutes.	2
NR10.	The system shall support at least 1,000 concurrent users without performance degradation.	4

\* (1 being the highest priority)

## 2.2 Study of user requirements

### 2.2.1 User stories

US0 : Home page(FAQ)

US1 : Asking Question Page

US2 : List of Questions Page

US3 : Specific Question Page

US4 : Database

US5 : Other functionalities

**Simple tasks (2 points)**

**Moderate tasks (3-5 points)**

**Complex tasks (8 points)**

No	As a [persona]	I [want to]	ra [so that]	points of story
US0.1	user	have access to a list of frequently asked question	I don't make a new request	2
US0.2	user	have access to the answer of frequently asked questions	I can get the answer (in the main page)	3
US0.3	user	access the questions page	I can read the listed questions	2
US1.1	user	ask questions	somebody can answer them	5
US1.2	user	indicate my language preference in a dropdown menu	I can be in contact with people who talk the same language as me	3
US1.3	user	choose a faculty in a dropdown menu	to restrict my area of research	3
US1.4	user	choose a department in a dropdown menu	to restrict my area of research	3
US2.1	user	access to the specific question page	he can answer it or add informations	3
US2.2	user	filtered the questions by faculty	he can answer question of a specific faculty	3
US2.3	user	filtered the questions by faculty department	he can answer question of a specific faculty department	3
US2.4	user	filtered the questions by preferred language	he can answer question of a specific language	3
US2.5	user	filtered the question by answered or not	he can answer question without answer	3
US3.1	user	add an answer	the question is answered	3
US3.2	user	access email contact	to send an email to the person who ask the question	5
US4.01	data administrator	will be able to access the database	they can view the information	3
US4.02	data administrator	insert question	the question is visible for the users	3
US4.03	data administrator	remove question	the question doesn't appears for the users	3

US4.04	data administrator	modify question	the question is well formulated	3
US4.05	data administrator	insert answer	the answer is visible for the users	3
US4.06	data administrator	remove answer	the answer doesn't appears for the users	3
US4.07	data administrator	modify answer	the answer is well formulated	3
US4.08	data administrator	insert language	the language is visible for the users	2
US4.09	data administrator	remove language	the language doesn't appears for the users	2
US4.10	data administrator	modify language	if the previous language wasn't enough clear	3
US4.11	data administrator	insert faculty	the faculty is visible for the users	2
US4.12	data administrator	remove faculty	the faculty doesn't appears for the users	2
US4.13	data administrator	modify faculty	the faculty name is up to date	3
US4.14	data administrator	insert faculty department	the faculty department is visible for the users	2
US4.15	data administrator	remove faculty department	the faculty department doesn't appears for the users	2
US4.16	data administrator	modify faculty department	the faculty department name is up to date	3
US4.17	data administrator	I want to configure and manage email notifications	to ensure that users are promptly informed of new answers to their questions	5
US5	user	I want to receive an email notification when one of my questions has been answered	can quickly view responses without needing to check the forum continuously.	8

### 2.2.2 Acceptance Criteria for User Stories

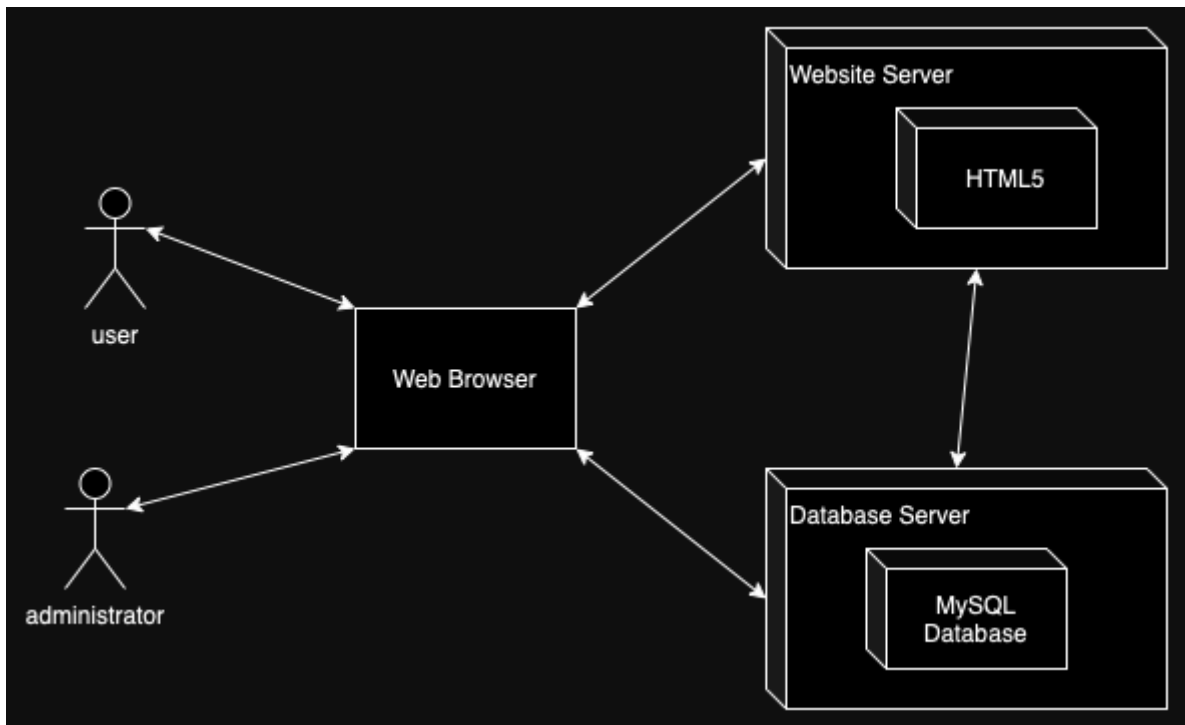
User story Number	Acceptance Criteria
AC0.1	The list of frequently asked question appears on the home page
AC0.2	When clicking on a question, the answer(s) appear(s).
AC0.3	By clicking the navigation bar, I can access to the page with all the question listed
AC1.1	The question appears in the forum of asked question.
AC1.2	When asking question, the user can choose his preferred language in a dropdown menu
AC1.3	The system must allow users to select a faculty from a dropdown menu, displaying a list of available faculties and updating research results accordingly, with proper functionality, accessibility, and error handling for empty or invalid selections.
AC1.4	When asking question, the user can choose his faculty department in a dropdown menu
AC2.1	The system must allow users to access a specific question page where they can view the question details, provide an answer, or add additional information.
AC2.2	The system must allow users to filter questions by faculty, displaying only questions from the selected faculty, and enable users to answer those questions directly.
AC2.3	The system must allow users to filter questions by faculty department, displaying only questions related to the selected department, and enable users to answer those questions.
AC2.4	The system must allow users to filter questions by their preferred language, displaying only questions in the selected language, and enable users to answer those questions.
AC2.5	The system must allow users to filter questions by their answered status, displaying only unanswered questions, and enable users to provide answers to those questions.
AC3.1	The user can successfully add an answer to a question, and the system confirms the question is marked as answered.
AC3.2	The user can access the email contact of the person who asked the question or answered.
AC4.01	By going on the MySQL interface, the administrator can see the database and manage it.
AC4.02	The administrator can add a question in the database.
AC4.03	The administrator can remove a question in the database.



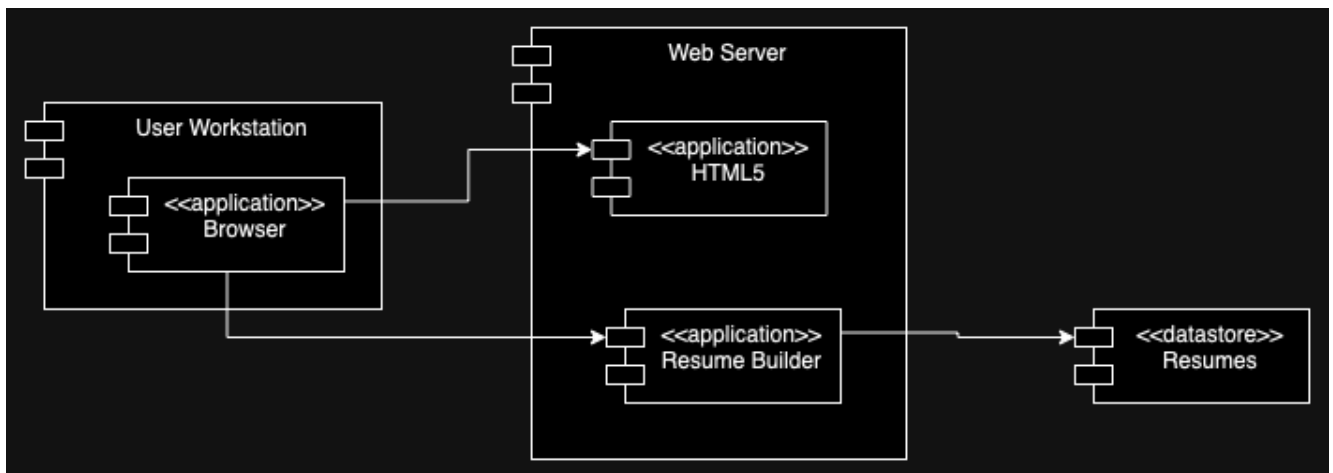
<b>AC4.04</b>	<b>The administrator can modify a question in the database.</b>
<b>AC4.05</b>	<b>The administrator can add an answer in the database.</b>
<b>AC4.06</b>	<b>The administrator can remove an answer in the database.</b>
<b>AC4.07</b>	<b>The administrator can modify an answer in the database.</b>
<b>AC4.08</b>	<b>The administrator can add a language in the database.</b>
<b>AC4.09</b>	<b>The administrator can remove a language in the database.</b>
<b>AC4.10</b>	<b>The administrator can modify a language in the database.</b>
<b>AC4.11</b>	<b>The administrator can add a faculty in the database.</b>
<b>AC4.12</b>	<b>The administrator can remove a faculty in the database.</b>
<b>AC4.13</b>	<b>The administrator can modify a faculty in the database.</b>
<b>AC4.14</b>	<b>The administrator can add a faculty department in the database.</b>
<b>AC4.15</b>	<b>The administrator can remove a faculty department in the database.</b>
<b>AC4.16</b>	<b>The administrator can modify a faculty department in the database.</b>
<b>AC4.17</b>	<b>The data administrator can configure and manage email notification settings, ensuring that users are promptly informed when new answers are added to their questions.</b>
<b>AC5</b>	<b>The user receives an email notification whenever one of their questions is answered, allowing them to quickly view the response without needing to check the forum.</b>

### 3 Conceptual system design

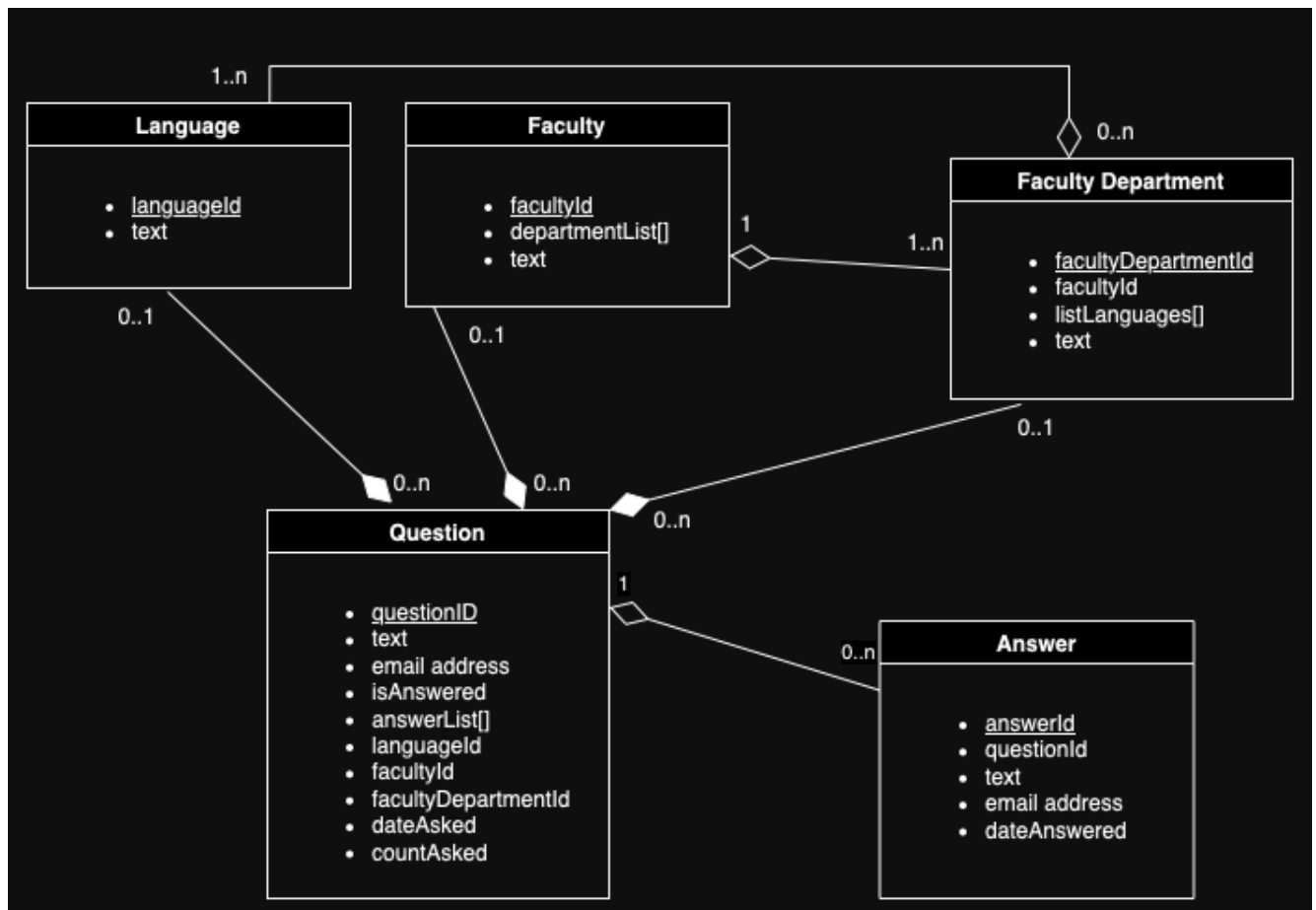
#### 3.1 Software architecture



#### 3.2 Decomposition of the system into modules



#### 3.3 Conceptual Database model



## 4 Resources

### 4.1 Acronyms

Acronym	Description
administrator	an entity of people that manage the data.
user	refers to both types of users. one who is asking a question or answering a question.

### 4.2 Others