

Darshan University

A Project Report on

"Foreign Education"

Under the subject

Software Engineering (2101CS503)

B. Tech, Semester – V

Computer Science & Engineering Department

Submitted By

Student Name: Dabhi Om Nitinbhai Enrollment No.: 21010101039

Academic Year

(2023-2024)

Internal Guide Dean-DIET

Prof. Ekta Baldha Dr. Gopi Sanghani

Darshan University Darshan University



Computer Science & Engineering Department Darshan University

DECLARATION

We hereby declare that the SRS, submitted along with the **Software Engineering (2101CS503)** for entitled **"Foreign Education"** submitted in partial fulfilment for the Semester-5 of **Bachelor Technology (B. Tech)** in **Computer Science and Engineering (CSE)** Department to Darshan University, Rajkot, is a record of the work carried out at **Darshan University, Rajkot** under the supervision of Prof. Ekta Baldha and that no part of any of report has been directly copied from any students' reports, without providing due reference.

Om Dabhi	
Student's Signature	
Date:	



Computer Science & Engineering Department Darshan University

CERTIFICATE

This is to certify that the SRS on "Foreign Education" has been satisfactorily prepared by Om Dabhi (21010101039) under my guidance in the fulfillment of the course Software Engineering (2101CS503) work during the academic year 2023-2024.

Internal Guide Prof. Ekta Baldha Darshan University Dean-DIET
Dr. Gopi Sanghani
Darshan University

SRS – Foreign Education

ACKNOWLEDGEMENT

I wish to express my sincere gratitude to my project guide Prof. Ekta Baldha and all the faculty members for helping me through my project by giving me the necessary suggestions and advices along with their valuable co-ordination in completing this work.

I also thank my parents, friends and all the members of the family for their precious support and encouragement which they had provided in completion of my work. In addition to that, I would also like to mention the Darshan University personals who gave me the permission to use and experience the valuable resources required for the project from the University premises.

Thus, in conclusion to the above said, I once again thank the faculties and members of **Darshan University** for their valuable support in completion of the project.

Thanking You

Om Dabhi

ABSTRACT

Studying abroad has become increasingly popular among students in recent years, as it offers numerous benefits and Opportunities for personal and academic growth. This study aims to explore the impact of studying abroad on student's educational experiences, cultural competence and future career prospects. By examining the experiences of students who have participated in study abroad programs. this research seeks to shed light on the advantages and challenges associated with studying in a foreign country. The finding of this study will contribute to the existing literature on study abroad programs and provide valuable insights for educators policymakers and students considering this education Opportunity.

Table of Contents

Lis	st of Fig	gures	
Lis	st of Ta	bles	II
1	Intro	oduction	1
	1.1	Product perspective	1
	1.2	Product features	1
	1.2.	1 Program Selection:	1
	1.2.2	2 Application Management:	1
	1.2.3	3 Pre Departure Support:	1
	1.2.4	4 Course Registration:	1
	1.2.	5 Financial Management:	1
	1.2.0	6 Accommodation and Travel Arrangements:	1
	1.2.	7 Health and Safety Resources:	1
	1.2.8	8 Communication and Support:	1
	1.2.9	9 Post-Program Evaluation:	2
	1.3	Functional Requirement	2
	1.3.	1 Student	2
	1.4	Non-Functional Requirement	2
	1.4.	1 Response Time:	2
	1.4.2	2 Scalability:	2
	1.4.3	Resource Utilization:	2
	1.4.4	4 Data Security:	2
	1.4.	S Authentication and Authorization:	2
	1.4.0	6 Legal Compliance:	2
	1.4.	7 Data Backup:	2
2	Desi	ign and Implementation Constraints	3
	2.1	Use case diagram	3
	2.2	Activity diagram and Swimlane diagram	4
	2.3	Sequence diagram	6
	2.4	State diagram	7
	2.5	Class diagram	
	2.6	Data flow diagram	9
	2.6.3	1 Context diagram (level-0)	9
	2.6.2	2 DFD Level-1	9
	2.6.3	3 DFD Level-2	10
3	Exte	ernal interface requirement (Screens)	11
	3.1	Screen-1: Registration Form	11
	3.2	Screen-2: Course Finder	12

SRS – Foreign Education

	3.3	Scre	een-3: E Brochure Gallery	13
4	Data	abase	e design	14
	4.1	List	of Tables	14
5	Stor	ies a	nd Scenario	15
	5.1	Stor	ry-1: Create Profile	15
	5.1.	1	Scenario# S1.1	15
	5.1.	2	Scenario# S1.2	15
	5.1.	3	Scenario# S1.3	16
	5.2	Stor	ry-2: Browse Study Program	16
	5.3	Stor	ry-3: Book Counselling Meeting	16
	5.4	Stor	ry-4: Save Favourite Programs	17
	5.5		ry-5: Payment System	
	5.6	Stor	ry-6: Student Advisor Chatbot	17
6	Test		<u> </u>	
7	Refe	erenc	ces	22

List of Figures

Figure 2.1-1 Use case diagram for Foreign Education	3
Figure 2.2-1 Activity diagram for Foreign Education	
Figure 2.2-2 Swimlane diagram for Foreign Education	
Figure 2.3-1 Sequence diagram for Foreign Education	
Figure 2.4-1 State diagram for Foreign Education	
Figure 2.5-1 Class diagram for Foreign Education	
Figure 2.6-1 Context diagram for Foreign Education	
Figure 2.6-2 DFD level-1 for Foreign Education	
Figure 2.6-3 DFD level-2 for Add Course	
Figure 3.1-1 Screen-1: Registration Form	
Figure 3.2-1 Screen-2: Course Finder	
Figure 3.3-1 Screen-3: Add Foreign Student	

SRS – Foreign Education

List of Tables

Table 3.1-1 Screen element of Registration form	11
Table 3.2-1 Screen element of Course Finder	12
Table 3.3-1 Screen element of Download E - Brochure	13
Table 4.1-1 Table: Student	14
Table 4.1-2 Table: Admin	
Table 4.1-3 Table: University	
Table 4.1-4 Table: Program	

1 Introduction

1.1 Product perspective

In an era of globalization, studying abroad has emerged as transformative experience for students Seeking to new broaden their horizons, acquire skills and enhance their intercultural competence. The number of students participating in study abroad programs has been steadily increasing. Reflecting the growing recognition of the benefits associated with international education However, despite the popularity of studying abroad, there is a need for future research to comprehensively understand the impact of these programs on student's academic, personal good professional development.

1.2 Product features

1.2.1 Program Selection:

- In this student can select their program.
- This platform begins by assisting organizers in selecting the right program for their needs.
- You can easily browse and compare various programs, allowing you to make informed decisions.

1.2.2 Application Management:

- Simplify the application process with our robust application management system.
- Organizers can efficiently collect, review, and manage applications, ensuring a smooth enrollment process for participants.

1.2.3 Pre Departure Support:

- We understand that preparing for a program can be overwhelming.
- Our pre-departure support feature provides participants with all the information and resources they need to prepare for their journey, including visa requirements, packing lists, and cultural insights.

1.2.4 Course Registration:

- For programs with an educational component, our platform offers a streamlined course registration process.
- Participants can easily select and enrol in the courses that align with their academic or professional goals.

1.2.5 Financial Management:

- Keeping track of program finances is made effortless through our financial management tools.
- Organizers can handle payments, track expenses, and generate financial reports with ease.

1.2.6 Accommodation and Travel Arrangements:

- Ensure participants have a comfortable and stress-free experience by managing accommodation and travel arrangements through our platform.
- From booking flights to securing lodging, we've got you covered.

1.2.7 Health and Safety Resources:

• Safety is a top priority. Our product provides access to vital health and safety resources, including emergency contacts, insurance information, and guidance on staying healthy and secure during the program.

1.2.8 Communication and Support:

- Effective communication is key to a successful program.
- Our platform facilitates communication between organizers and participants through messaging features, making it easy to address questions, concerns, and updates.

1.2.9 Post-Program Evaluation:

• After the program concludes, our product allows for a thorough post-program evaluation. Collect feedback from participants and organizers to gain insights into the program's strengths and areas for improvement, helping you refine future offerings.

1.3 Functional Requirement

1.3.1 Student

- User Registration: User can register their self for counselling.
- Program Search: User can explore program.
- Application Management: get updated by state of application.
- Program Selection: After counselling student can select program according to their choice.
- Pre-departure Orientation: In this program user get informed on important information.
- Course Enrolment: After applying university/college will respond to application if user get selected than we need to send conformation of course enrolment.
- Housing and Accommodation: In this we have a third party that will manage all the property for student .
- Financial Management : In this we cover from education load to money transfer services.
- Communication and Support : We have team that will communicate with student and support them in every situation.
- Evaluation and feedback: Student have their mentor they will do continuous counselling for better starting of new things.

1.4 Non-Functional Requirement

1.4.1 Response Time:

• The website should load quickly, with minimal latency, to provide a smooth user experience.

1.4.2 Scalability:

• The website should be able to handle increased traffic during peak application periods without a significant drop in performance.

1.4.3 Resource Utilization:

It should efficiently use server resources, such as CPU and memory, to avoid bottlenecks...

1.4.4 Data Security:

 Personal and financial data of users should be encrypted and securely stored to protect against data breaches.

1.4.5 Authentication and Authorization:

• Implement robust user authentication and authorization mechanisms to ensure that only authorized users can access certain features or data.

1.4.6 Legal Compliance:

• Ensure compliance with relevant data protection laws (e.g., GDPR), copyright regulations, and other legal requirements in various regions where the website operates..

1.4.7 Data Backup:

 Regularly backup user data and system configurations to prevent data loss in case of hardware failures or other disasters.

2 Design and Implementation Constraints

2.1 Use case diagram

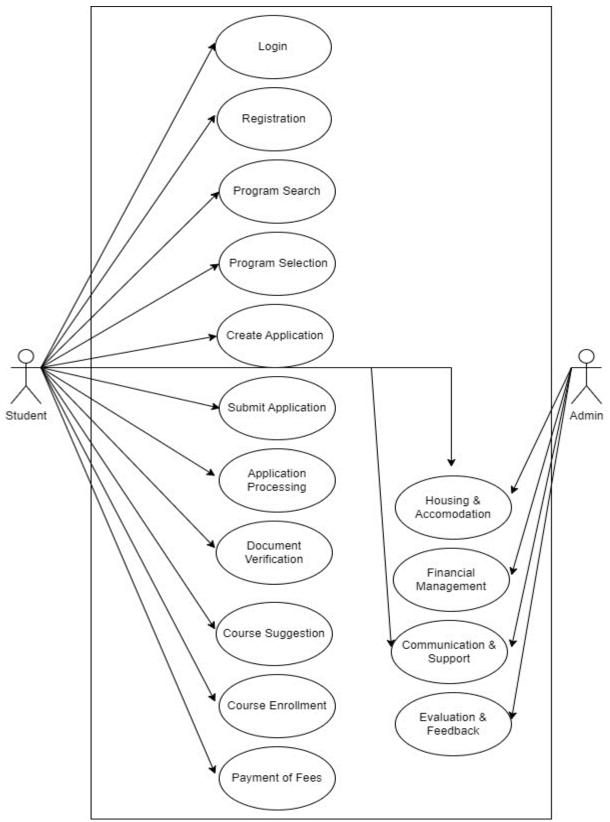


Figure 2.1-1 Use case diagram for Foreign Education

2.2 Activity diagram and Swimlane diagram

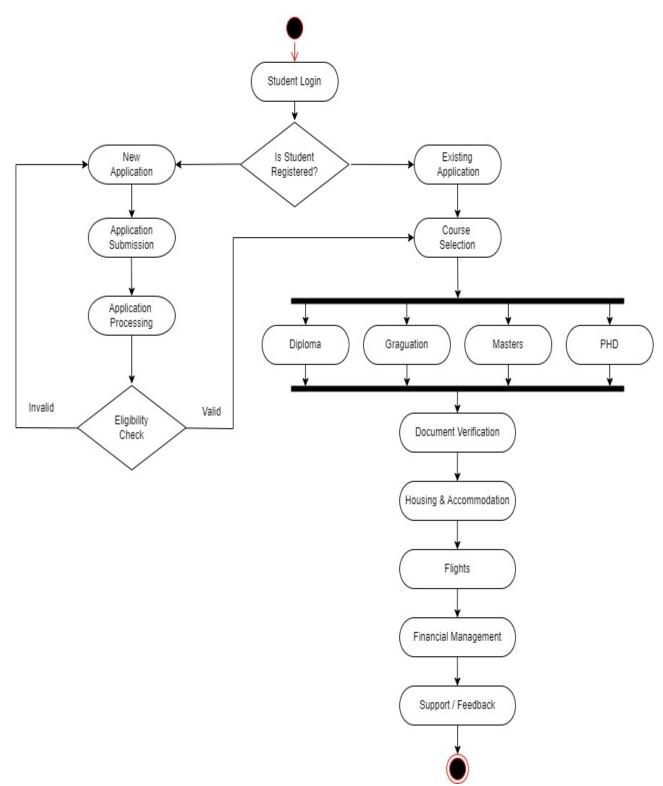


Figure 2.2-1 Activity diagram for Foreign Education

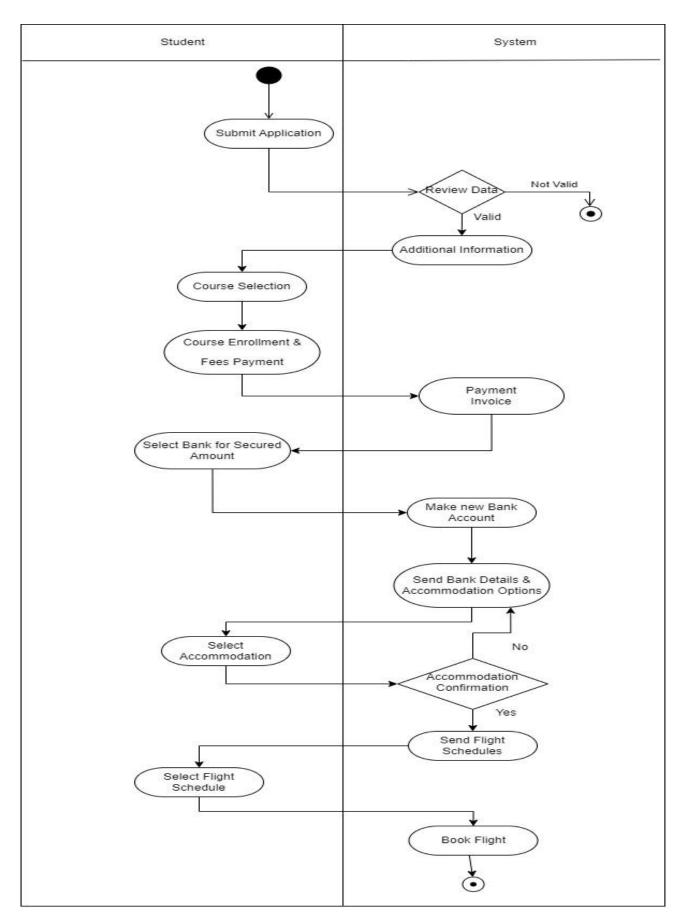


Figure 2.2-2 Swimlane diagram for Foreign Education

2.3 Sequence diagram

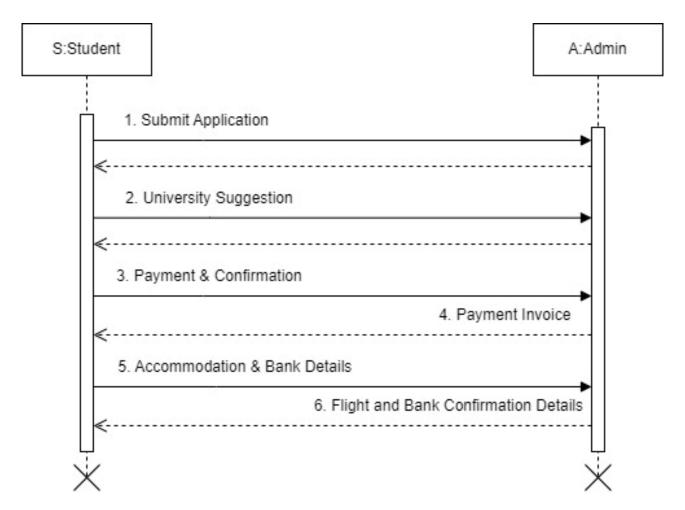


Figure 2.3-1 Sequence diagram for Foreign Education

2.4 State diagram

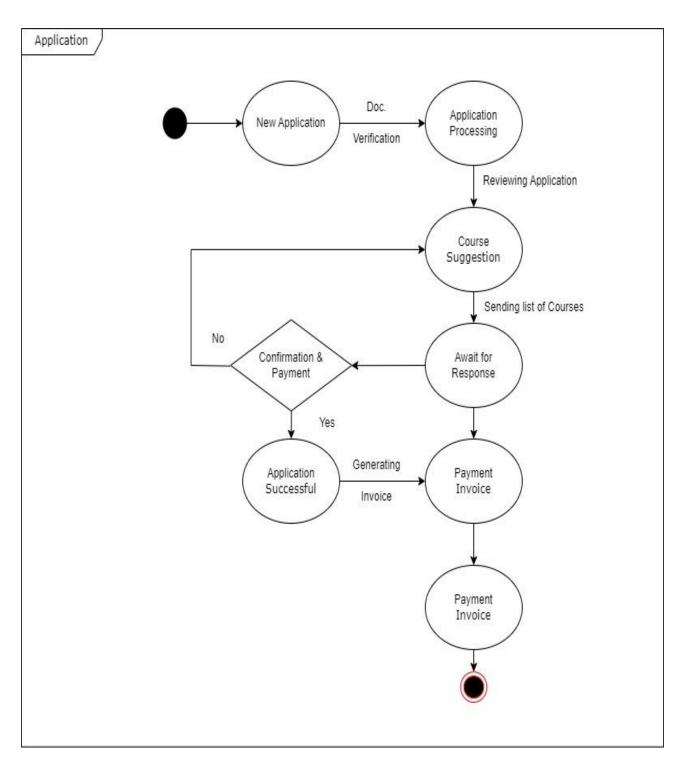


Figure 2.4-1 State diagram for Foreign Education

2.5 Class diagram

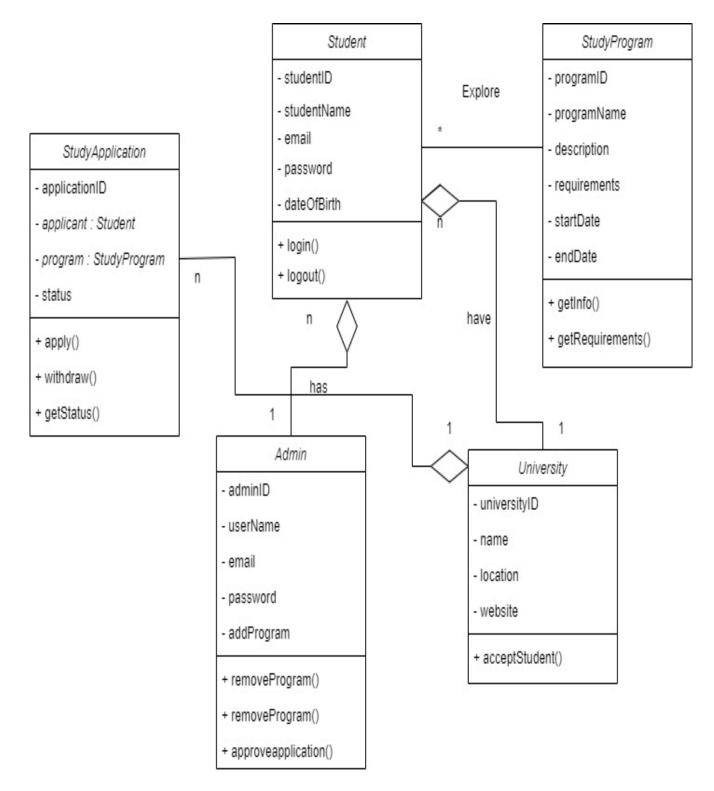


Figure 2.5-1 Class diagram for Foreign Education

2.6 Data flow diagram

2.6.1 Context diagram (level-0)

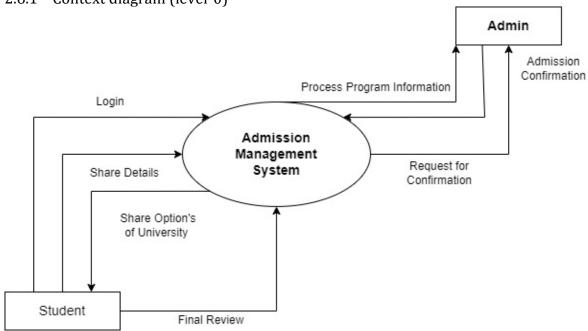


Figure 2.6-1 Context diagram for Foreign Education

2.6.2 DFD Level-1

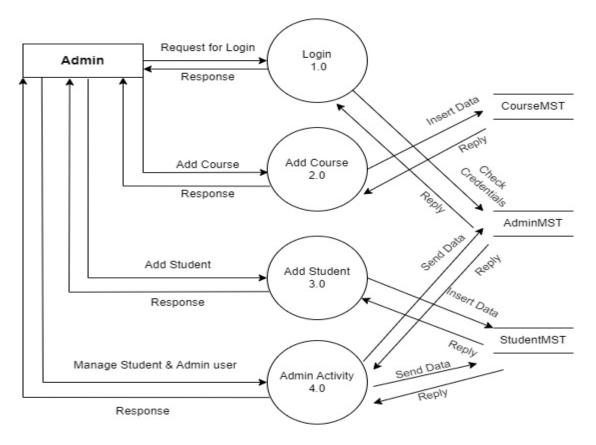


Figure 2.6-2 DFD level-1 for Foreign Education

2.6.3 DFD Level-2

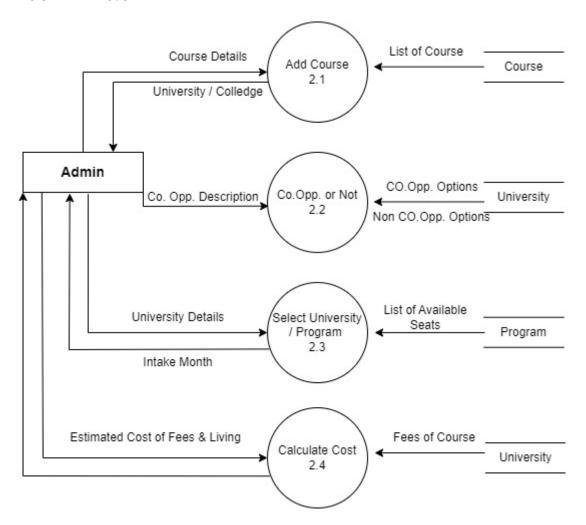


Figure 2.6-3 DFD level-2 for Add Course

3 External Interface Requirement (Screens)

3.1 Screen-1: Registration Form

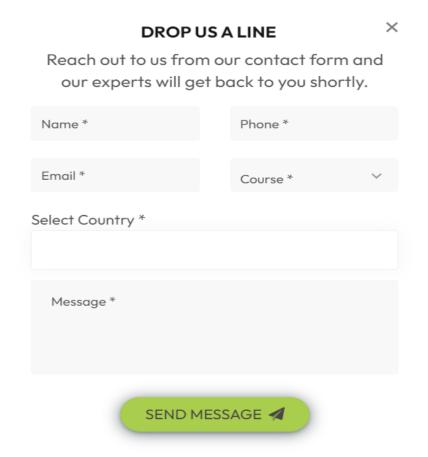


Figure 3.1-1 Screen-1: Registration Form

Purpose: This form will allow the target end-users to register in the system. To register , the following information will be encoded in the system.

Table 3.1-1 Screen element of Registration form

Sr.	Screen Element	Input Type	O/M	1/N	Description	
1	Name	Textbox	М	1	Username field should be editable and accept the Username.	
2	Email	Textbox	М	1	Email field should be editable and accept the email with proper format.	
3	Phone	Textbox	М	1	Phone field should be editable and accept the phone with proper format.	
4	Course	Dropdown	М	1	Course field should be selectable.	
5	Select Country	Dropdown	M	1	Checkbox for Selecting Country.	
6	Message	Textbox			Textbox for Sending additional query.	
7	Send Message	Button			Send Message is a button for send the entered data into database.	

3.2 Screen-2: Course Finder

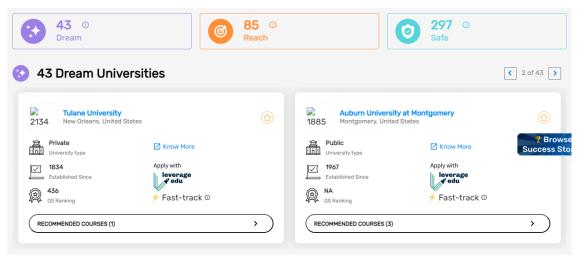


Figure 3.2-1 Screen-2: Course Finder

Purpose: This will be result of sorted field of the university/college according to student's profile.

Sr.	Screen Element	Input Type	O/M	1/N	Description	
1	Dream	Button	М	1	Dream is Courses that should be considered as top priority of student according to their profile.	
2	Reach	Button	М	1	Reach is Courses that should be considered as Best option for student according to their profile.	
3	Safe	Button	M	1	Safe is Courses that should be considered as easy to get into them for student according to their profile.	
4	Recommended Course	Link			Link for navigate to the recommended university's course that student should considered.	
5	University Card	Card			It will shows basic information of university.	

Table 3.2-1 Screen element of Course Finder

3.3 Screen-3: E Brochure Gallery

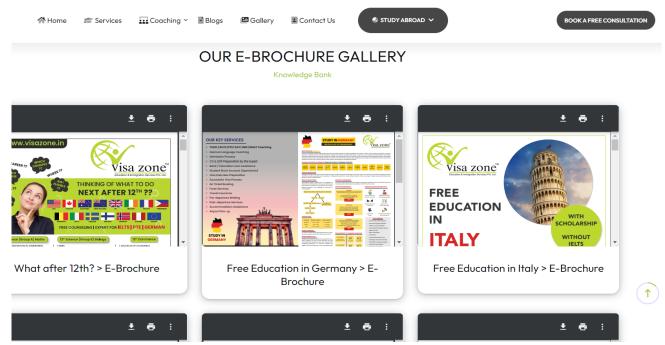


Figure 3.3-1 Screen-3: Add Foreign Student

Purpose: This module will allow the user to explore the different country information and they also can download.

Table 3.3-1 Screen element of Download E - Brochure

Sr.	Screen Element	Input Type	O/M	1/N	Description
1	Home	Button	М	1	This button will link to the home page of website.
2	Services	Button	М	1	This button will link to the services page of website.
3	Coaching	Button	М	1	This button will link to the Coaching page of website.
4	Blog	Button	0	1	This button will link to the Blog page of website.
5	Gallery	Button	М	1	This button will link to the Gallery page of website.
6	Contact Us	Button	М	1	This button will link to the Contact Us page of website.
7	Study Abroad	Dropdown	0	1	This Dropdown will shows the Country' Name as option.
8	Book	Button			Book is a button for Scheduling the Counselling Meeting.

4 Database design

4.1 List of Tables

- Student
- Admin
- University
- Program

Table 4.1-1 Table: Student

Column	Data Type	Null	Keys & Constrains	Default Value & Description
StudentID	int	NN	PK (Auto Increment)	
StudentName	varchar(100)	NN		Student's Name
Email	varchar(100)	AN		
Password	Varchar(50)	AN		
DateOfBirth	datetime	AN		

Table 4.1-2 Table: Admin

Column	Data Type	Null	Keys & Constrains	Default Value & Description
AdminID	int	NN	PK (Auto Increment)	
UserName	varchar(100)	NN	FK	
Email	varchar(100)	NN		
Password	Varchar(50)	NN		

Table 4.1-3 Table: University

Column	Data Type	Null	Keys & Constrains	Default Value & Description
UniversityID	int	NN	PK (Auto Increment)	
Name	varchar(100)	NN		
Country	varchar(100)	NN		
Website	varchar(100)	NN		URL of Website

Table 4.1-4 Table: Program

Column	Data Type	Null	Keys & Constrains	Default Value & Description
ProgramID	int	NN	PK (Auto Increment)	
ProgramName	varchar(100)	AN		
Description	varchar(100)	AN		
Requirements	varchar(100)	AN		
Department	varchar(100)	AN		
Contact	number(10,0)	AN		

5 Stories and Scenario

5.1 Story-1: Create Profile

Story # S1	:	As a Student,	
		I want to create my profile	
		So that I can share my details to the admin.	
Priority	:	High	
Estimate	:	L	
Reason	:	The development of a Profile page is medium task but it's priority is high cause without creating profile I can't register for counselling.	

5.1.1 Scenario# S1.1

J.I.I SCEIIAII	lUπ	31.1			
Scenario \$1.1	:	Student Profile Update			
Prerequisite	:	User must be registered and logged in.			
Acceptance	:	User clicks on their profile icon or name.			
Criteria		The system displays the user's profile page.			
		User selects the "Edit Profile" option.			
		The system presents a form with fields for personal information (name,			
		contact, address, etc.).			
		User updates their information and saves the changes.			
		The system validates the updated information for correctness ar			
		completeness.			
		User sees a success message confirming the profile update.			
		The system reflects the changes immediately on the user's profile page.			
		User can navigate away from the profile page, and when they return, the			
		updated information remains visible.			

5.1.2 Scenario# \$1.2

Scenario \$1.2	:	Student Reviews and Ratings			
Prerequisite	:	: User must be registered and logged in.			
		User should have visited a university's profile page.			
Acceptance	:	User navigates to a university's profile page.			
Criteria		The system displays university details, including programs offered, admission requirements, and facilities. User scrolls down to the "Reviews and Ratings" section. User submits a rating (from 1 to 5 stars) and a written review. The system validates the review for appropriate length and content. User clicks the "Submit" button. The system records the rating and review for that university. The system updates the average rating for the university. Other users can view the newly submitted rating and review on the university's profile.			

5.1.3 Scenario# S1.3

Scenario \$1.3	: University Application Submission
Prerequisite	: User must be registered.
	User should have selected a university and program of interest.
	User should have prepared all required documents.
	User should have a valid payment method for application fees.
Acceptance	: User navigates to their chosen university's profile page.
Criteria	User clicks on the "Apply Now" button.
	The system validates the user's login status.
	The system displays an application form with relevant fields (personal
	information, academic history, documents upload, etc.).
	User fills out the application form.
	The system validates the form for completeness and correctness.
	User uploads the required documents.
	The system confirms successful document uploads.
	User proceeds to payment.
	The system calculates and displays the application fee.
	User enters payment information and confirms payment.
	The system generates an application confirmation page.
	User receives a confirmation email with application details.
	The system updates the user's application status to "Pending Review."

5.2 Story-2: Browse Study Program

Story # S2	:	As a Student,
		I want to explore different programs
		So that I can decide which program is best for me.
Priority	:	Medium
Estimate	:	M
Reason	Reason : The development of a Explore is medium task because it's the phase	
		student don't know that much about the course they know what they had
		heard so after counselling student can not finalize their requirements for
		course.

5.3 Story-3: Book Counselling Meeting

Story # \$3	:	As a Student,	
		I want to gain some information	
		So that I have to talk to expert.	
Priority	:	High	
Estimate	:	M	
Reason	:	The development of a Book Counselling page is high without counselling	
		student or provider can not achieve conclusion of any decision.	

5.4 Story-4: Save Favourite Programs

C1			
Story # \$4	:	As a Student,	
		I want to save some programs	
		So that I can shows to my mentor or keep it with me.	
Priority	:	Low	
Estimate	:	S	
Reason	:	The development of save favourite program is Low because that's feature that	
		provide convenience to student that may not reflect to any final decision.	

5.5 Story-5: Payment System

Story # \$5	:	As a Student,	
		I want pay my Fees or transfer to my new account	
		So that I have to use international payment getways.	
Priority	:	High	
Estimate	:	L	
Reason	:	The development of a Payment system priority is high and also it's large size	
		page this should be done in accurate manner.	

5.6 Story-6: Student Advisor Chatbot

Story # \$6	:	As a Student, I am afraid of asking So there is chatbot that can assist student with common question.	
Priority	:	High	
Estimate	:	L	
Reason	:	The development of Student Advisor Chatbot's priority is high because studen	
		can get answer of their query in instant manner but it's in Large size.	

6 Test cases

Project Name:	Study Abroad	Test Designed by:	Om Dabhi
Module Name:	Program Listings Page	Test Designed date:	26-08-2023
Release Version:	1.0	Test Executed by:	Bill Gates
		Test Execution date:	26-08-2023

Pre-condition: Program Listings Page should be working Fine					
Test Case ID	Test Title	Test Type	Description	Test Case ID	
TC_001	Test the filters and sorting options for programs list.	Functional	Check all filters and sorting function working accordingly	TC_001	
TC_002	Verify that clicking on a program leads to the correct page.	Functional	Check program links works properly	TC_002	
TC_003	Test that the "Apply Now" button for each program directs users to the application form.	Functional	verify that for all program apply now button can have link to application form	TC_003	

Test Case Title	Test all field of the application form
Test Type	Functional
Test Priority	High
Pre-condition	Application Form should be Works perfectly

Test Step	Test Case Description	Expected Result	Actual Result	Statu s	Comment	Data	Bug ID
1	Fill the whole form check for format correction	Form should accept value as formatted according	Works as Expected	Pass	Form is absolutely perfect according to your company standard	-	
2	Upload file after filling application form	Upload will only accessible when student fill whole form in particular manner	Uploaded Successfully after filling valid data in form	Pass			
3	fill the form and click on submit button that lead to form view page	After filling application form student direct to form view page in that they have to verify and give final acknowledgemen t as per their knowledge	Works as Expected	pass			
4	Enter valid captcha code in captcha field	Captcha field should editable and accept captcha and captcha is case sensitive	Captcha input accepted	Pass	Step required when human action validation perform	get captch a from image which is near by captch a field	
5	Click on submit application button	Student should login into site and navigated to dashboard	Student navigated to dashboard and username should be display in top of the right side.	pass			

Test Case Title	Verify that mandatory fields are appropriately marked and must be filled to submit.
Test Type	Functional
Test Priority	Medium
Pre-condition	Application Form should be Works perfectly

Test Step	Test Case Description	Expected Result	Actual Result	Statu s	Comment	Data	Bug ID
1	To Check the system displays the message "Successfully Submitted" in the next page when the user submits the form with valid data.	Should be display an Submitted message	Displays As Expected	Pass			
2	To Check the Name Text box can be accepted only less than 30 character in length.	Should be display an error message enter if character size is greater than 30	Display an error of long user	Pass			
3	To check Name Textbox can be accepted only alphabetic values.	Write Name field only in alphabetic values	Accept alphabetic values	Pass			
4	To Check the Email Text box can't be accepted a invalid numerical values.	Set required field validation Email	Display accepted email	Pass			

Test Case Title	Check for error messages or unexpected behaviour when loading the				
, , , , , , , , , , , , , , , , , , , ,	homepage.				
Test Type	Functional				
Test Priority	Medium				
Pre-condition	Program Listings Page should be working Fine				

Test Step	Test Case Description	Expected Result	Actual Result	Statu s	Com ment	Data	Bug ID
1	To Check the system displays the appropriate error message in the error message in the error page when the data is invalid.	After entering invalid data it shows error	Displays As Expected	Pass		-	
2	To Check the system displays the message "Successfully Submitted" when the user submits the form without fills the non mandatory fields.	Should be displays "Successfully Submitted"	Form Successfully Submitted	Pass			
3	To check the entered data can be deleted by clicking "Cancel" button		Data is deleted	Fail			

7 References

- https://www.javatpoint.com/uml
- https://leapscholar.com