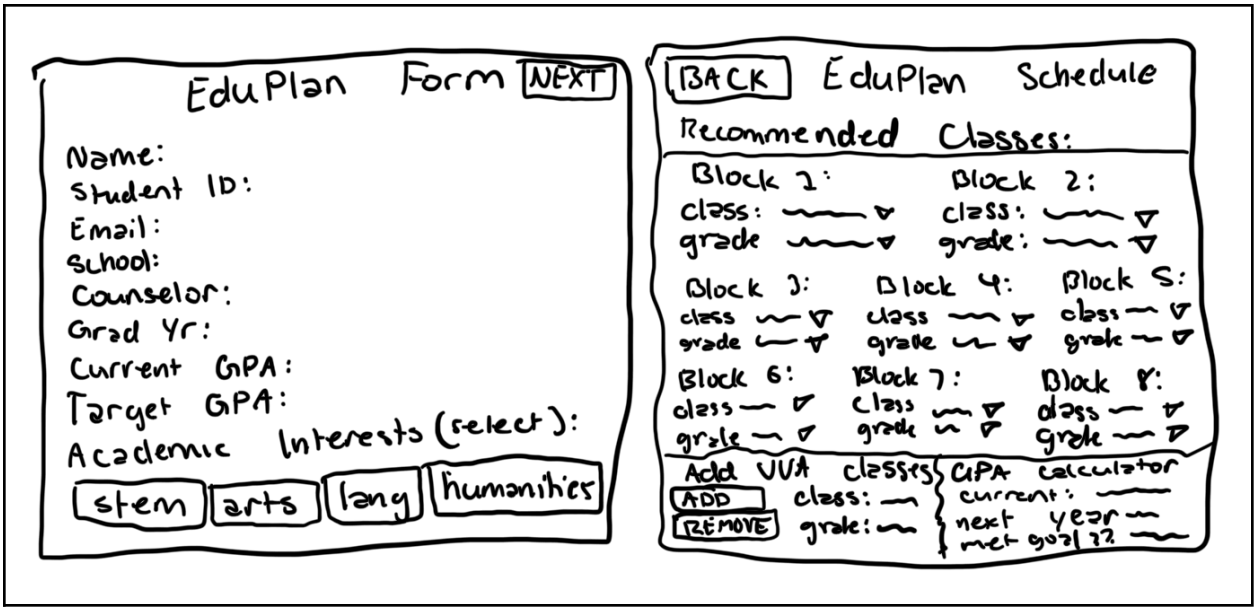
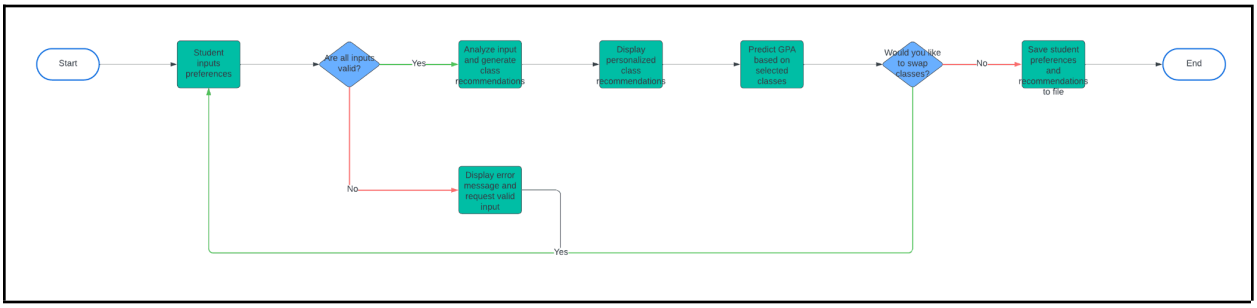
Criterion B: Design

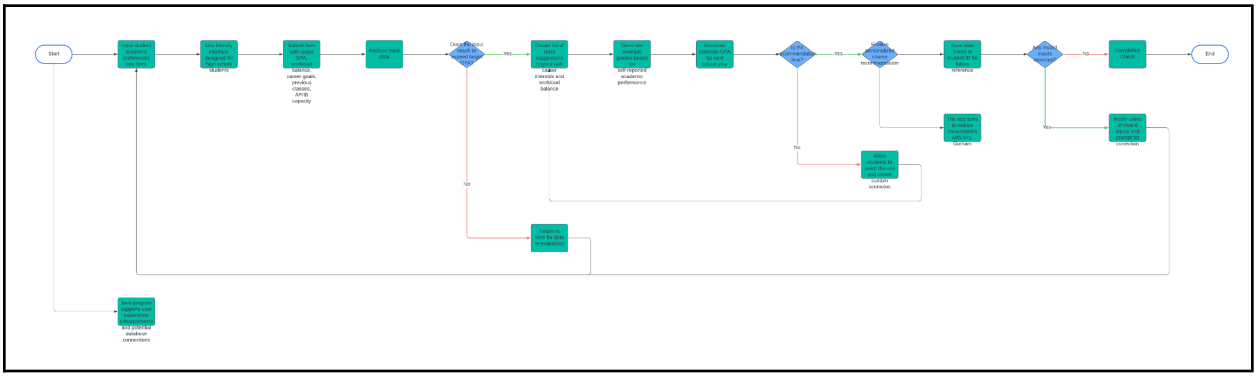
Design of the Solution:



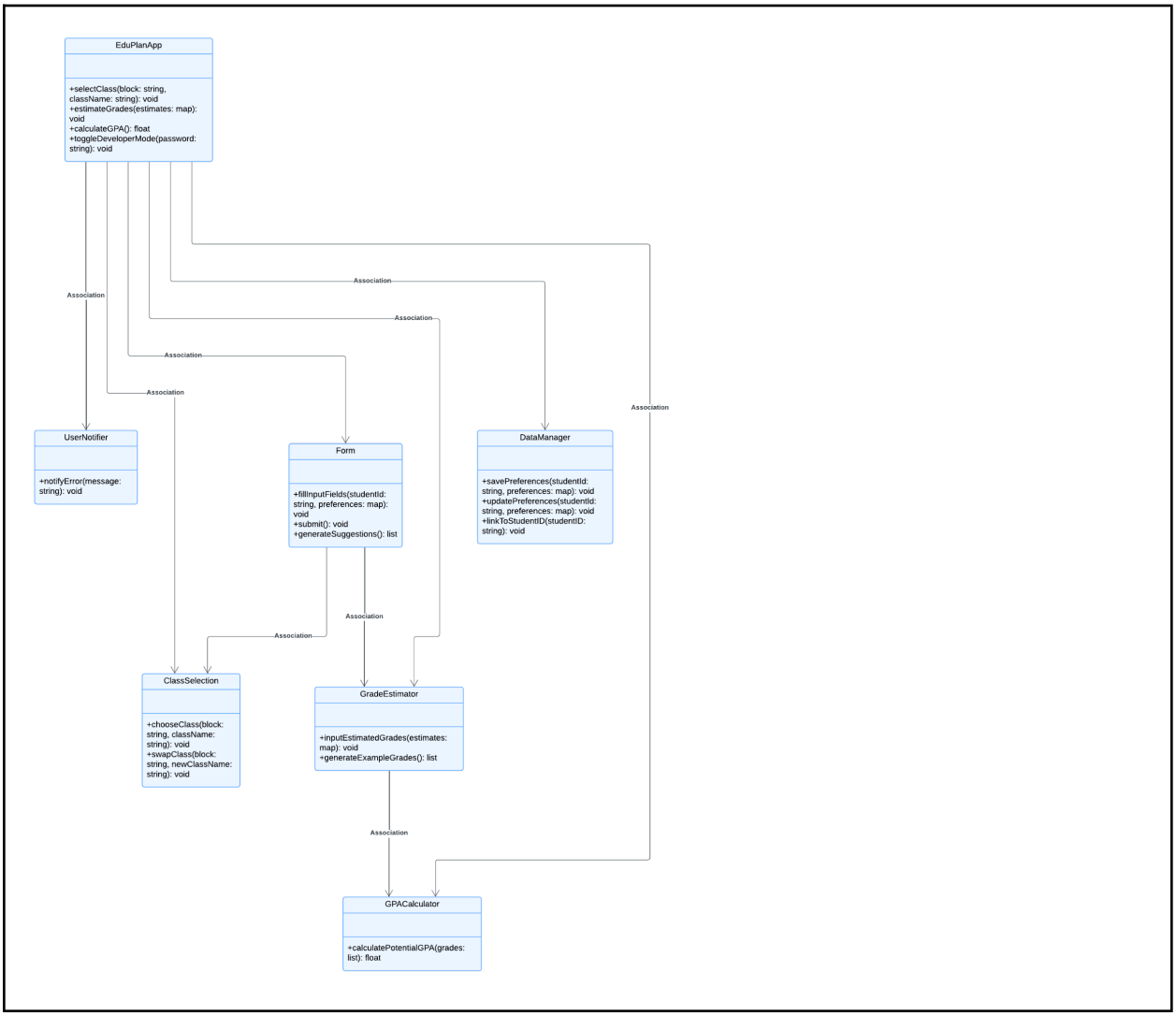
System Flowchart:



Algorithm Flowchart:



UML Class Diagram:



Test Plan (Must include all criteria for success)

#	Action to Test	Method of Testing
1	Users will be able to input their academic preferences into a functional form.	Be able to click on as many of the available academic preferences and this changes the recommended courses based on what is selected.
2	After filling out the form there will be a computer-generated schedule.	Fill out the form and then ensure that all 8 blocks have a recommended course and a predicted grade in them.
3	The algorithm will generate	Check to see that if the GPA is lower then

	recommended courses based on the student's self-reported academic performance through current GPA on the form.	the amount of weighted (IB and AP) classes recommended lowers accordingly.
4	The students will be able to customize the computer-generated course recommendations by switching the classes for different ones and changing the projected grade for each class.	After generating a schedule, the user should be able to open a dropdown menu for each course name and predicted grade to change it, and the predicted GPA should update.
5	The students will be able to export their recommended schedule into a PDF format to be able to show their counselor with ease.	After creating a schedule and clicking the export button, a PDF should automatically start downloading with all the schedule data.
6	Error handling will be included to notify users of invalid inputs or selections such as inputting letters into a field that should only accept numbers and inputting a student ID longer than 6 digits.	The user will not be able to user the website if an incorrect value is inputted into one of the boxes and it will prompt the user to fix this error.

Criterion B: Record of Tasks

Task #	Planned Action	Planned Outcome	Time Estimated	Target Completion Date	Criterion
1	Initial discussion of possible project ideas	A survey going around the school asking people about problems during their day-to-day life.	1 day	December 2024	A
2	Contact client.	Discuss the possibility of digitizing the course	1 day	December 2024	A

		schedule selection process.			
3	BEgin writing Criteria A	Finish Criteria A	2 hours	December 2024	A
4	Start Record of Tasks	Finish the Record of Tasks	1 hour	January 2025	B
5	Draw a basic GUI	Have a general idea of all the website features to be coded	30 minutes	January 2025	B
6	Begin UML designs and flowcharts	Finish UML designs and flowcharts	3 hours	January 2025	B
7	Start Criteria B	Finish Criteria B	2 hours	January 2025	B
8	Start coding the basic HTML and CSS for the form and schedule generator	Finish coding the design	5 hours	January 2025	C
9	Start coding the classes for each course name	Finish coding the classes	3 hours	January 205	C
10	Create the form questions and make it functional to collect data	Finish the form	4 hours	January 2025	C
11	Code the	Finish	10 hours	February	C

	algorithm that takes in form data to decide what courses to suggest the user to take	creating this algorithm		2025	
12	Start debugging and add error handling to meet success criteria	Finish debugging	3 hours	February 2025	C
13	Start writing criteria C	Finish criteria C	3 hours	February 2025	C
14	Receive client feedback with the finished product	Understand how each aspect of the website is either successful or can be improved	20 minutes	February 2025	E
15	Add extra CSS, animations, fix any bugs, and optimize the algorithm	Finish optimizing	3 hours	February 2025	E
16	Begin writing Criteria e	Finish criteria E	2 hours	February 2025	E
17	Begin recording for Criteria D	Finish Criteria D	20 minutes	March 2025	D
18	Finish IA	Submit IA	1 hour	March 2025	All