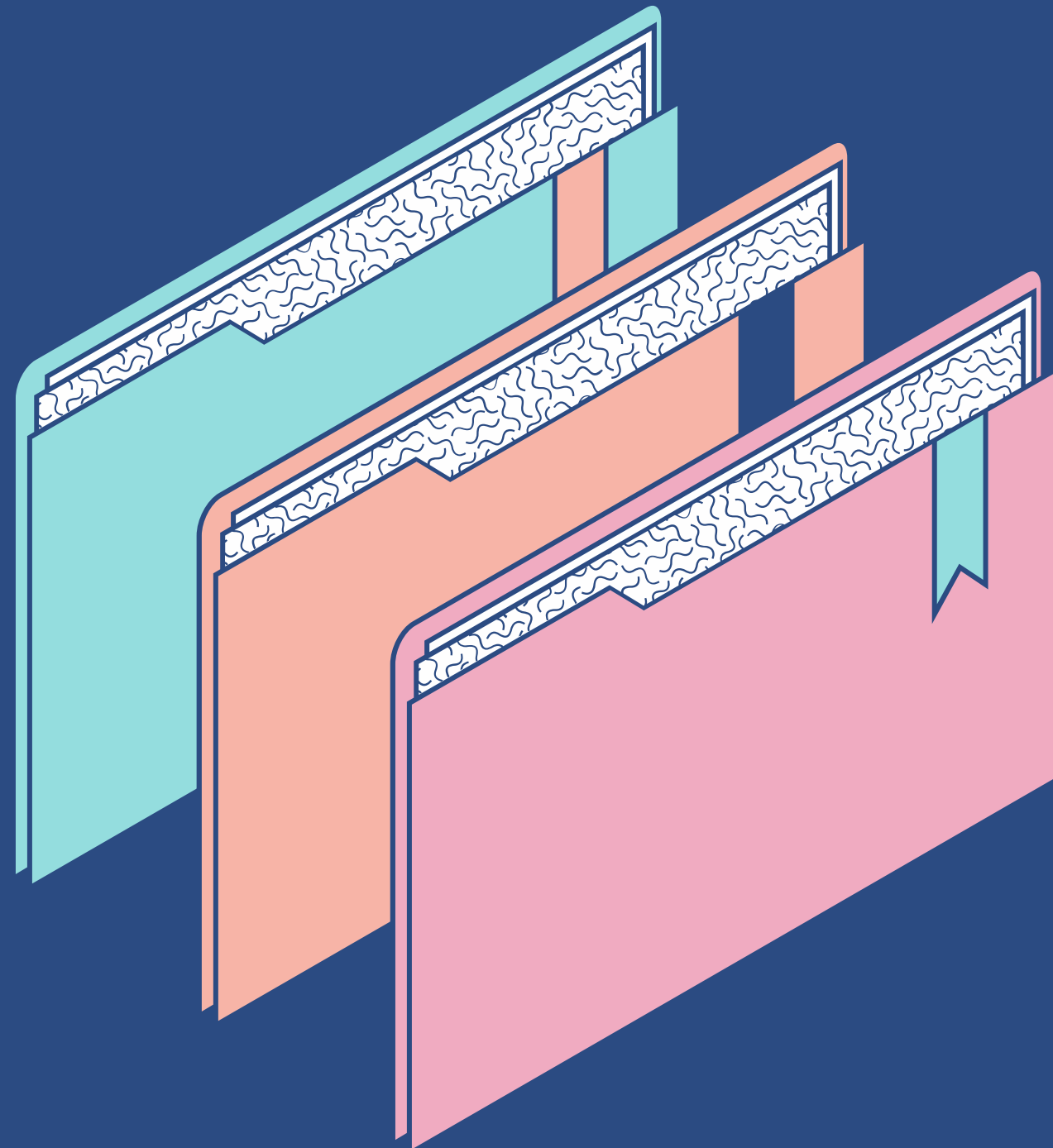# Student Specialty Advisor

Student Specialty Advisor

Decide Now!

Aymen Hammami - Aziz Maazouz - Youssef Aydi - Mahdi Klouz

OUTLINE

- Overview
- Problem & Solution
- Featured Elements
- Target Customers
- Methodology
- Product Backlog
- Use Case
- Sprint Planning
- Tools
- Deployment
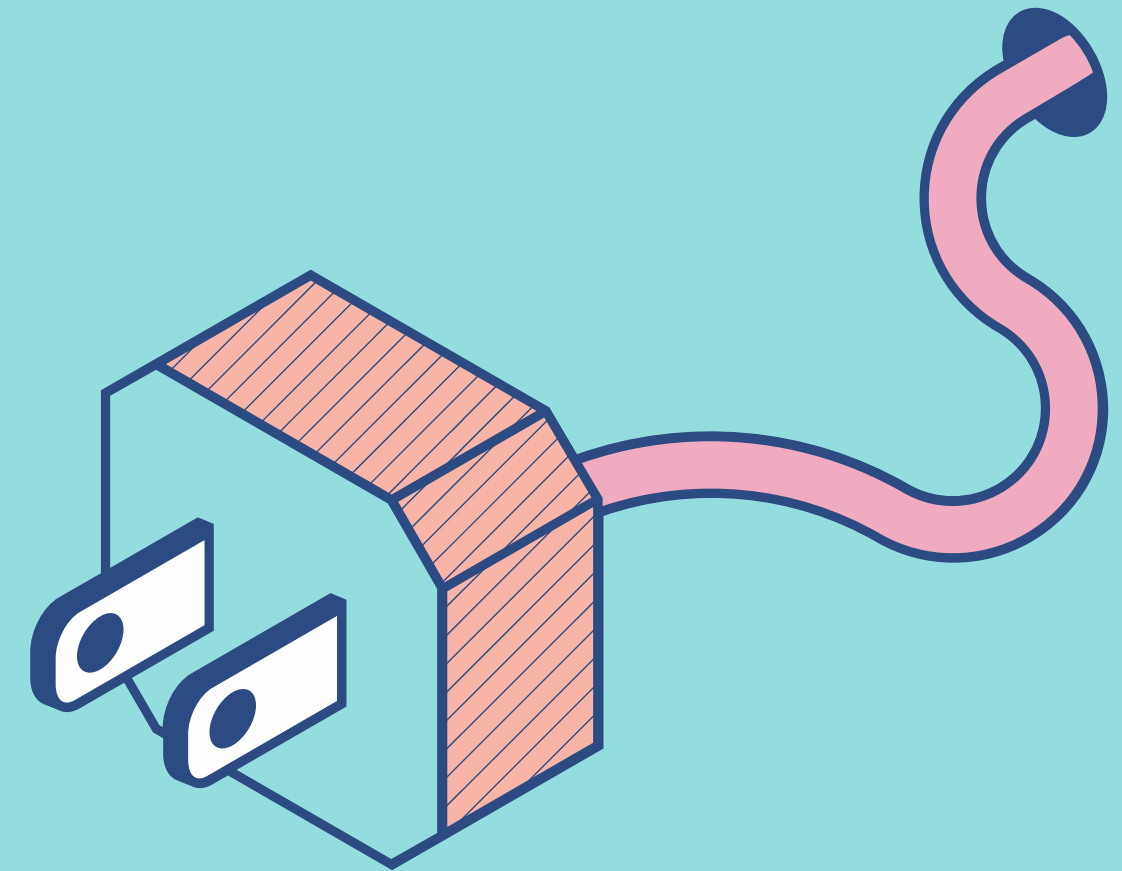- Assistance Chat Bot
- Demo Time
- Summary & Future Plans

OVERVIEW

There is no doubt that every student will face difficulties when it comes to picking their specialty. It will most likely define their future after all.

THE PROBLEM

The current information a MedTech student can get from the administration or through the university website is:

- Mostly outdated.
- Lacking personalization.
- Lacking former students feedback.

THE SOLUTION

By Students. For Students.

We are offering a free web-based application with multiple features that aims to help our students to pick the right choice.

Student Specialty Advisor

Decide Now!

FEATURED ELEMENTS

UNDERGO A COMPATIBILITY QUIZ

EXPLORE ALL THE INFORMATION YOU NEED IN ONE PLACE

MEET WITH ADVISORS

PARTICIPATE IN A COMMUNITY FORUM

CHAT WITH AN ASSISTANCE BOT

TARGET CUSTOMERS

MedTech students who are in their Freshman or Sophomore year.

Former or current MedTech students who wish to contribute with their experiences and feedback.

MedTech students who are unconvinced with their current specialty or wish to enroll in another one.
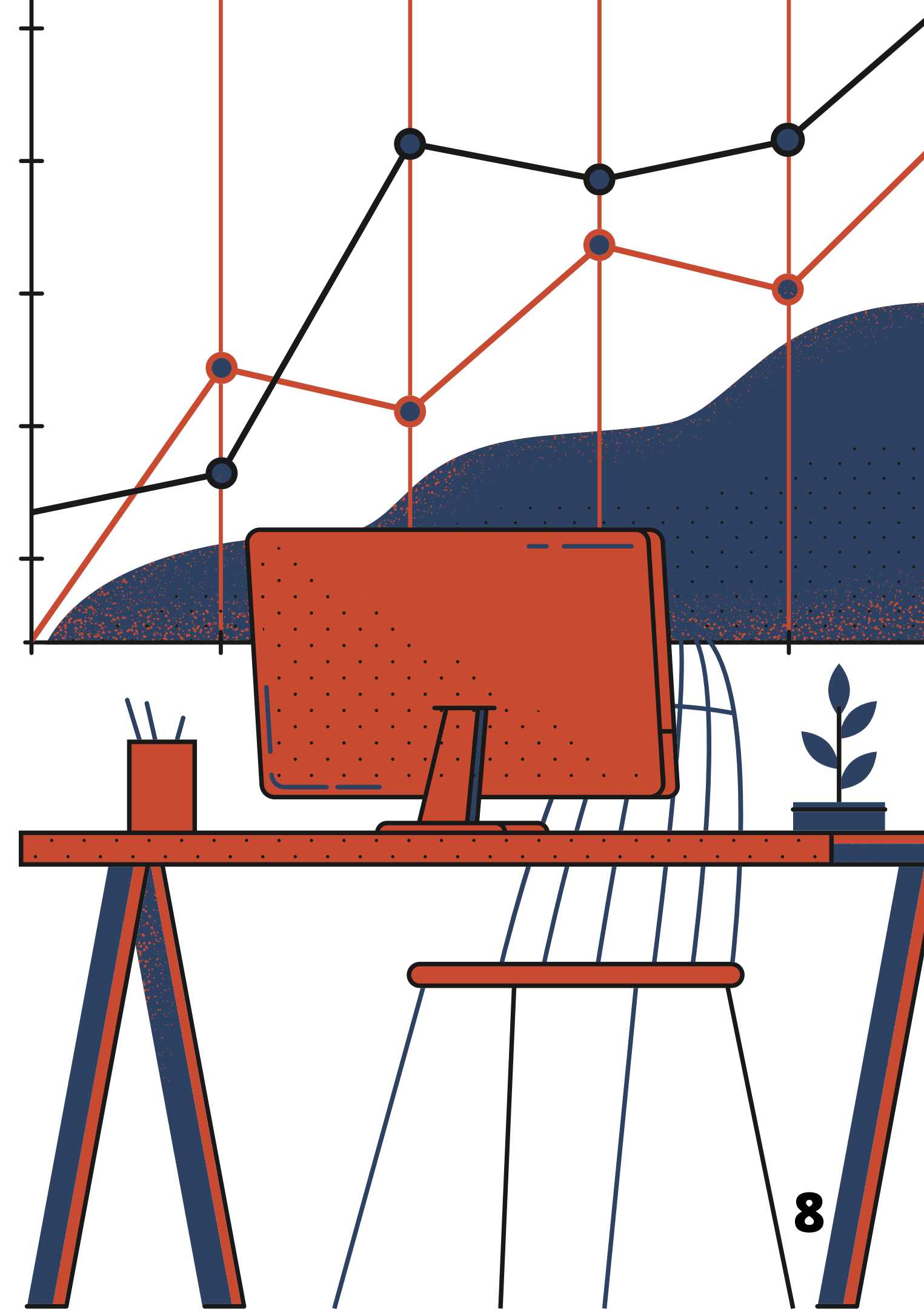
Methodolgy

For our development, we used the **scrum** framework.

Product Owner: Mrs. Asma Amdouni

Scrum Master: Aymen

Development Team: Youssef, Mahdi, Aziz

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PRODUCT BACKLOG

ID	As a	I want to be able to	So that	Priority
1	Visitor	Sign up / Create an account	I can use all the website features	MUST
2	User	Log into my account	I can use all the website features	MUST
3	User	Change my profile information	I can keep my profile up to date	SHOULD
4	User	Change my password or email	I can controll access to my account	SHOULD
5	User	Take a program compatibility quiz	I can know which specialty suits me	MUST
6	Admin	Generate random answers to the quiz	I can improve the quiz algorithm and collect information	COULD

PRODUCT BACKLOG

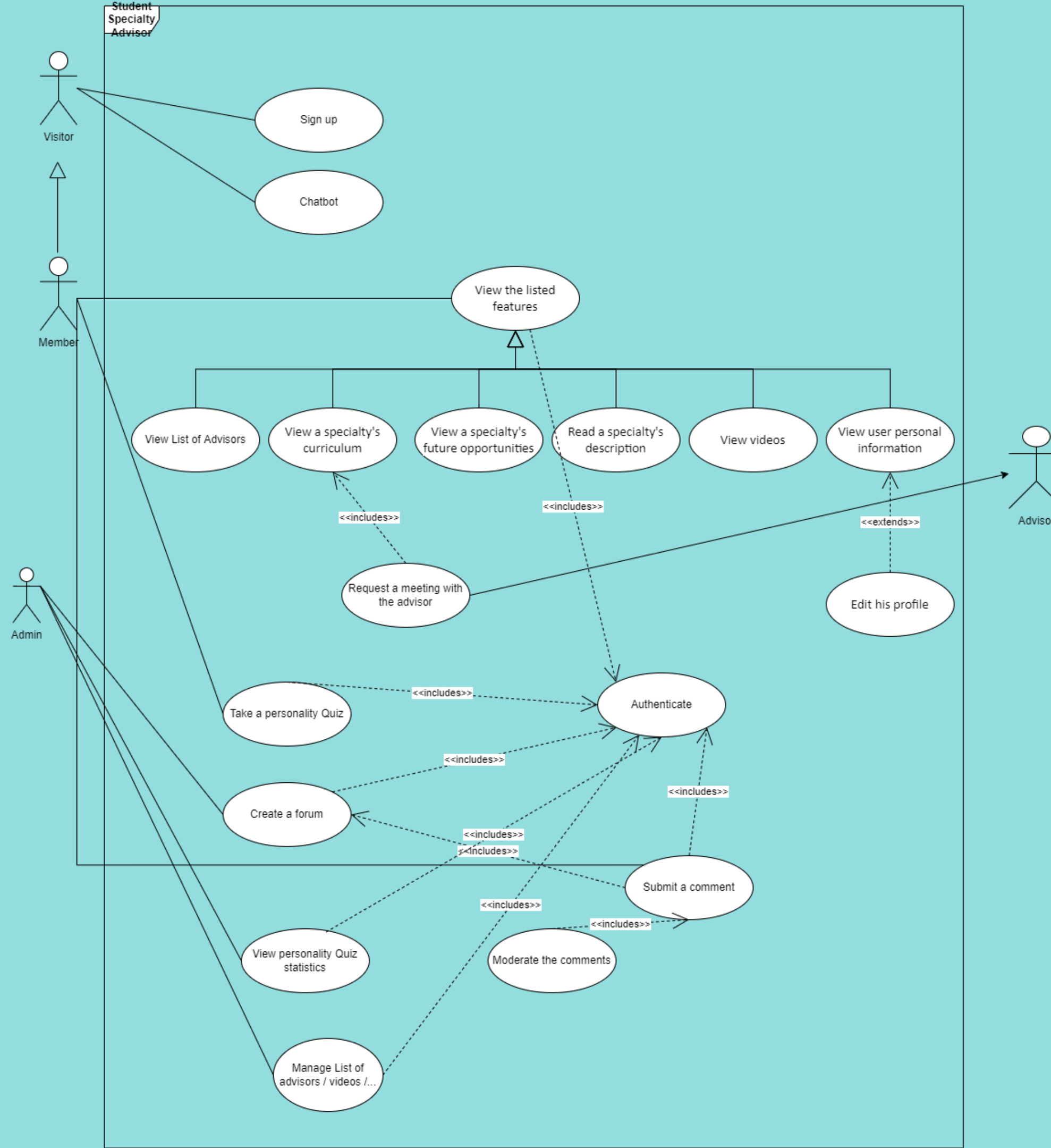|				
7	User	Display videos about the different specialties	I can get a good idea about them	SHOULD
8	User	Display in-depth information about specialties such as description, curriculum, future opportunities..	I can know what to expect if I pick that specialty	MUST
9	User	Request a meeting with an advisor (student or professor)	I can ask my questions about the specialty to the advisor	MUST
10	User	Display the advisor contact information	I can contact them myself through an another way	SHOULD
11	User	Display the advisor availability	I can get an idea about the time of the meetings	MUST
12	User	Apply to become an advisor (student)	I can help other students with my experience	COULD

PRODUCT BACKLOG

13	Admin	Display statistics about the program compatibility quiz from the dashboard	I can improve the quiz algorithm and collect information	MUST
14	Admin	Manage the list of advisors and their scheduled meetings from the dashboard	I can easily update the list of advisors and the times of the meetings	MUST
15	Admin	Manage the list of videos in the specialty videos section from the dashboard	I can easily update the list of the published videos	SHOULD
16	Admin	Manage the list of the signed up users from the dashboard	I can have better control on who is using the website	SHOULD

PRODUCT BACKLOG

17	User	Display the community forum	I can participate in the threads and discussions there	MUST
18	User	Post a comment in a forum's discussion	I can share my opinion about a specialty or a subject	MUST
19	User	Delete a comment I posted in a forum's discussion	I can control what comments to leave	COULD
20	User	Display the comments inside a forum's discussion	I can see what other users think about a specialty or a subject	MUST
21	Admin	Moderate comments	I can remove offensive or misleading comments	SHOULD
22	User	Suggest improvements and send feedback	I can contribute to the website's usability and content	SHOULD
23	User	Report a bug that happened to me	I can contribute to it getting fixed	SHOULD
24	Visitor Or User	Chat with an assistance bot	I can get help with the website or a specialty	MUST

Student Specialty Advisor

Visitor
Member
Admin
Advisor

Sign up
Chatbot
View the listed features
View List of Advisors
View a specialty's curriculum
View a specialty's future opportunities
Read a specialty's description
View videos
View user personal information
Request a meeting with the advisor
Edit his profile
Take a personality Quiz
Create a forum
Authenticate
Submit a comment
View personality Quiz statistics
Moderate the comments
Manage List of advisors / videos /...

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SPRINT PLANNING

SPRINT 1	**Account System** **Profile Management**	**DONE**
SPRINT 2	**Personality Quiz** **Statistics about the quiz**	**DONE**
SPRINT 3	**Specialty-Introduction Videos** **In depth Information**	**DONE**

SPRINT PLANNING

SPRINT 4	Meetings	DONE
SPRINT 5	Admin Dashboard & Assistance Bot	DONE
SPRINT 6	Community Forum	DONE

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TOOLS

ENVIRONMENT	FRONTEND	BACKEND	DATABASE	SOURCE CONTROL
NODE JS	REACT JS + 16 PACKAGES	EXPRESS JS + 6 PACKAGES	MONGO DB	GIT

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DEPLOYMENT

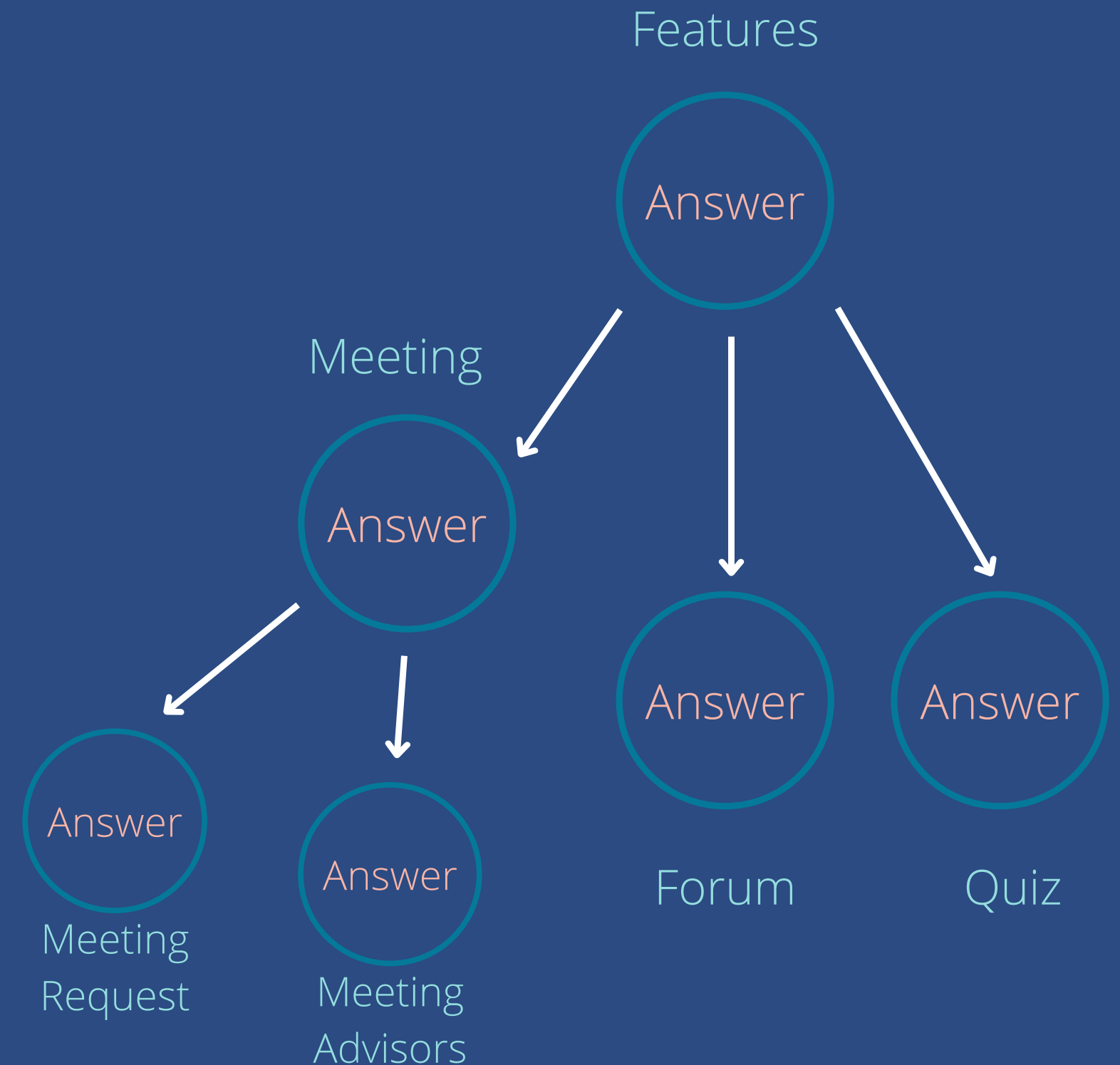**HTTPS://STUDENT-SPECIALTY-ADVISOR.HEROKUAPP.COM/**

ASSISTANCE CHAT BOT

The chat bot uses a tree where every node has a **Key** and a **Value**.

The Key represents keywords found in the user's input.

The Value represents the answer to the target keyword.

Using **Depth First Search (Postorder)**, we can find the answer that matches the keywords

Features

Answer

Meeting

Answer

Answer

Answer

Answer

Meeting Request

Answer

Meeting Advisors

Forum

Quiz

ASSISTANCE CHAT BOT

STEP 1
WELCOME MESSAGE

STEP 2
USER INPUT

STEP 3
ANSWER TO USER INPUT

BREAK DOWN
INTO KEYWORDS

USE DFS TO
LOOK UP
KEYWORDS IN
TREE

Demo
Time

SUMMARY

Student Specialty Advisor is a web-based application aimed at MedTech students to help them choose the specialty that suits them best.

To achieve this goal, we developed a multi-feature project that the users can enjoy once they join the community.
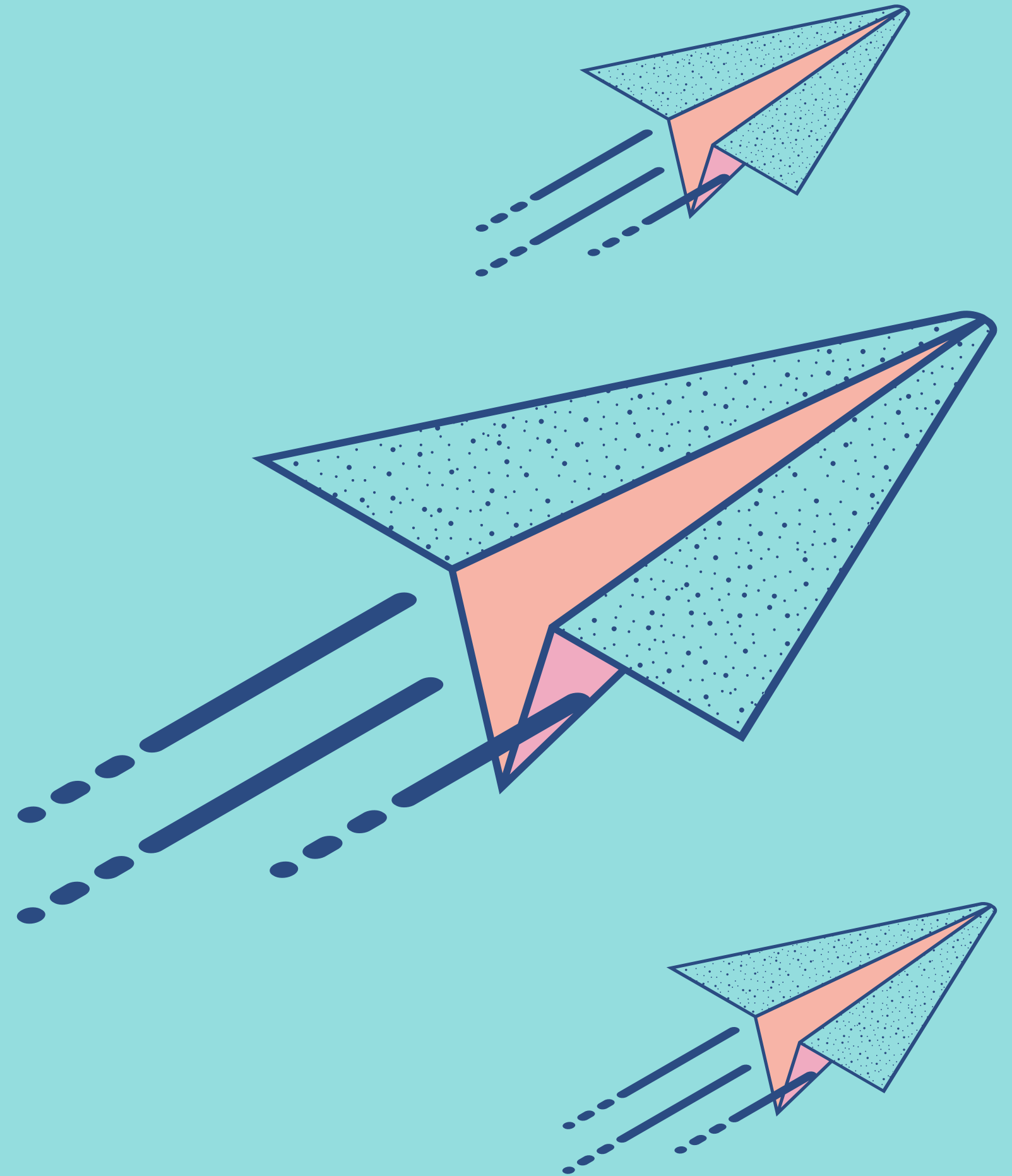
So far, we have managed to deliver all the features in a functional and a bug-free state.

FUTURE PLANS

We think that going open source will bring more traffic to the web application, will be a great addition to the global software development course, and will help improve the quality and development of student specialty advisor.

Thank you for your attention!

Do you have any questions for us?