

ISS PROJECT

~ requirements ~

I. FAQ Chat Bot:

The FAQ's chat bot's purpose is to provide users with information about the ads presented in the application and their statistics.

As a user, I require a service that provides comprehensive explanations of technical concepts, found in the ads presented. The service should aim to simplify complex terminology and ensure that it is presented in a manner accessible to any users.

* Features (for users):

- when the chat is accessed, the first questions to show are the most frequently asked;
- a user can browse and select questions from a pre-made list covering a wide range of topics related to the application's domain;
- a user can choose a topic and questions from that specific topic will show;
- the list should be organized in a user-friendly manner, allowing for easy navigation and search functionality (like questions about a specific ad);
- if a user does not find the information they are looking for, they have the option to submit a new question;
- a user can provide feedback, such as rating the service/suggesting improvements;
- a user cannot exceed adding 3 questions/day;

As an admin, I want the ability to efficiently manage user-submitted questions, provide accurate responses, and oversee the addition of new questions to the pre-made list.

* Features (for admins):

- an admin can add new questions;
- an admin can delete outdated questions;
- an admin can edit questions in the list;
- an admin can answer user submitted questions/ reject them (if they are not relevant);
- an admin can view user feedback;
- admins will have a 'to-do' list, so they can cooperate on maintaining the chat freely, which they can edit;
- questions/answers will automatically update if the data processed from the ads changes;

II. Manage the users/admins of the Chat Bot:

* Features(user):

- a user needs to be logged in to ask a question;

- a user can check the status of the submitted question: approved/ rejected/ still pending verification;
- a user can choose to receive notifications about newly added questions or about changes to the existing ones;
- if a user adds multiple questions and demonstrates active engagement, they can become eligible to be promoted to the role of an admin;

***Log in section:**

- users need to register with a unique username or email that is not already in use within the system;
- passwords must meet certain criteria to ensure security:
 - o minimum length: at least 8 characters.
 - o complexity: require a combination of uppercase letters, lowercase letters, numbers, and special characters.
 - o no common passwords: prohibit the use of easily guessable passwords, such as "password" or "12345678".
 - o password expiration: encourage users to change their passwords periodically for enhanced security.

***Login Attempts:**

- implement measures to limit the number of unsuccessful login attempts within a certain timeframe to prevent attacks; after a certain number of failed attempts, temporarily lock the account or introduce a CAPTCHA verification step;
- offer the option for users to enable a second form of verification for added security;
- require users to agree to terms of service and a user agreement upon registration;

***Features(admin):**

- an admin is able to see users who have asked a question
- an admin can upgrade an user's account to become an admin, if the user is active and becomes eligible
- the admin can ban/see banned users
- provide admins with access to a user's history of asked questions, interactions, and feedback; this can be useful for assessing the user's eligibility for promotion to admin status or for understanding the context behind repeated inquiries.
- for an admin to be deleted, a voting section takes place between all admins; if the percentage goes over 75% in votes, the admin gets kicked out;
- the master admin, which will have more control, after going through complaints of other admins, can initiate the vote;

III. Processing Ads:

As an admin, I want the ability to efficiently process the ads that are being run, and provide accurate data about their performance in the application.

*Features:

*Ad Performance:

- collect and process data on key performance metrics such as impressions, clicks, click-through rate (CTR), conversions, engagement rate, and cost per acquisition (CPA);
- record details about where the ads were placed within the social media platform, including specific pages, groups, or feeds, and the positioning (e.g., news feed, sidebar);
- track the time of ad engagement (what time/date the ad performs best);
- capture data about the ad creative elements, such as images, videos, headlines, and ad copy, to analyze which elements resonate most with the audience;

IV. Graph Statistics:

As a user, I want to see information / statistics about different stuff in an easy to understand manner, and see correlations between the information that is being shown and other data such that the ads can be optimized to attract a bigger and more specific user base.

* **Displayed graphs:**

* **Click graph.**

- displays the number of clicks received by the ad over time;

* **Click rate graph.**

- shows the user when the ad was clicked the most (peak click periods);

* **Impression graph.**

- shows the business user when the ad was viewed by the most app users.
- it can be extended to show specific attributes about the app users viewing the ad that have been collected, such as: age, location, gender, preferences, etc.

* **Revenue graph.**

- shows the user when the most amount of revenue was generated by the ads that have been placed in the app.

* **Conversion graph.**

- this graph demonstrates the number of conversions (desired actions completed by users who clicked on the ad) generated by the ad over time (for example, users who after interacting with the ad, made a purchase)

***Cost per acquisition.**

- shows CPA, which is the total cost of the ad campaign divided by the number of conversions, over time;

*** Graphs' features:**

- should look good from an aesthetic point of view, should be able to set custom themes(colors, shapes, etc.)
- for dates-related graphs, to be able to zoom / select a specific interval of time, i.e February 2020 - July 2024.
- for numerical graphs to be able to specify a specific range, i.e ages 18-35, make averages or sums, etc.
- for graphs based on categories to be able to view by category / groups of categories, i.e people that are middle aged and like fishing.
- sorting for most of the unsorted data, i.e if viewing people that like fishing you can see the number of people sorted by age or something like that.
- prediction for dates-related graphs for the current trends, i.e surely won't take into considerations special factors such as pandemics.

V. Exporting Documents

As a user I want to be able to export my statistics easily, in any format that might be necessary, having access to any formatting options that may be required.

*** Different ways of exporting said graphic data.**

- Export as a pdf
- Export as png
- Export as csv
- Have it sent on email or downloaded

*** Select the data that gets exported**

- The user has a menu for selecting information and finalizing the file
- A list is presented of all possible statistics
- User can add statistics manually or add all/remove all of them
- Images can be included or simply text
- Signature, Intended Recipient(s), Date can be added if desired

*** Design and Formatting**

- Where applicable the user can choose between a few different formats
- Styling for the text and graphs on documents
- User can choose to have the data be saved on different pages

VI. Billing and Payments

As a business administrator/manager, I want the payments of the ads to run as smoothly as possible, with a clear overview of the daily/monthly/yearly expenditures.

***Features**

- admins can manage the bank accounts that are associated with the business and are used for payments

- when making the subscription payment for an ad to be displayed throughout the application, admins can choose how they want to pay
- for every ad, 5 days before the expiry date, an email is sent to the admin reminding them of the ad with its performance and other statistics
- when a payment fails, the associated bank account is suspended and the admin is notified

* Payment:

* contains fields for entering:

- card information (card number, expiration date, CVV)
- billing information (name, address, city, state, ZIP code, country)
- subscription amount (autocompletes based on how much the ad will appear in the application, duration of subscription)
- dropdown menu for currency selection (RON, EUR)
- terms and conditions have to be accepted for the payment to occur;

Payment Options:

- provides options for preferred payment method (Visa, Mastercard, PayPal)
- remember me: checkbox to save payment information.

Payment Form

*Data required to complete payment

- name under which the card is registered
- card number (32 digits)
- expiration date (MM/YY)
- CVV (3-digit number)
- warning messages for incorrect data formats;

VII. Ad Compliance Monitoring:

As an administrator of the application, I want to ensure that all ads displayed within the platform comply with relevant regulations, policies, and community standards. Using the calculated statistics gathered, I want to be able to send reports of the activity of the ads, and the worth of their active subscription plans.

*Features:

*Content Review:

- implement ad content review processes to screen ads for compliance with legal requirements, platform policies, and community guidelines;
- assess ad content for prohibited content, including misleading claims, offensive material or illegal products/service;
- if the ads do not comply, send a report back to the producer of the ads regarding the situation;

*Subscription Plan Evaluation:

- calculate the value of active subscription of the sold ads based on the subscription fee and the rate of how well the ad is performing;
- factor in metrics such as impressions, clicks, conversions, and engagement rates to determine the overall value generated by each subscription plan.

- provide insights into the effectiveness and return on investment (ROI) of subscription plans to inform pricing strategies and optimize revenue generation;
- *Scheduled Reporting:
 - schedule automated reports that generate up-to-date insights about all the processed data gathered from the ads (impressions, CTR, etc.)
 - specify the frequency of these reports (daily/weekly/monthly etc.)

VIII. “Kahoot”-like Game with Ads:

After a long session of searching things, a game of Kahoot is what you need. Both users and admins can join Kahoot where they are met with questions based on the information we gathered from processing the ads.

*Features:

*Game Types:

- games can be either global, open to all topics, or specific to a certain theme or subject.

*User/Admin Interaction:

- Both users and administrators can join games.
- Users and administrators can also participate in tournaments.
- Users and administrators receive reminders about upcoming tournaments three days in advance.

*Scoring Mechanism:

- Points are awarded based on the speed of answering questions. Faster responses earn more points.
- Visual cues indicate whether an answer is correct or incorrect.
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*Round Feedback:

- After each round, participants can see how many people answered each question correctly or incorrectly.

*Final Scoreboard:

- At the end of the game, a final scoreboard displays the rankings of all participants.

*Audio:

- Background music, such as the iconic Kahoot music, plays during the game.

*Winner Banner:

- The user who wins a game is awarded a winner banner that lasts for one day.

*Monthly Leaderboard:

- At the end of each month, a larger leaderboard is displayed.
- The top five users on this leaderboard automatically become eligible for administrator status.