

Weekend Ideas Application - Requirements

1. General Description

The "Weekend Ideas" application is a system that allows users to submit, view, vote on, and comment on ideas for spending the weekend. Users can enter new ideas with details such as name, description, and category, as well as interact with other people's ideas through votes and comments. A ranking system will show the most popular ideas.

2. Main Features

2.1 Idea Management

- **Submitting an idea:**
 - Users can submit a new idea with the following details:
 - **Name:** Short title of the idea (e.g., "Hike in the National Park").
 - **Extended Description:** Descriptive text that explains the idea.
 - **Category:** Mandatory choice between:
 - **Hiking**
 - **Eating**
 - **Museum**
- **Validation:**
 - The system verifies that all mandatory fields are filled.
 - The length of the name must not exceed 100 characters.
 - The length of the description must not exceed 100 characters.

2.2 Viewing Ideas

- Users can view the list of ideas, which can be filtered by:
 - Category (Hiking, Eating, Museum).
 - Ranking (from highest to lowest score).
 - Date of submission (most recent).
- Each idea shows:
 - Name.
 - Description.
 - Category.
 - Average score (from 1 to 5).
 - Number of votes.
 - Number of comments.

2.3 Voting on Ideas

- Users can assign a vote to an idea:
 - The vote is an integer between 1 and 5.
 - Each user can vote for a given idea multiple times.
- **Calculating the average score:**
 - The system updates the average score of the idea in real time.

2.4 Comments

- Users can add a comment to an idea.
- Each comment must include:
 - Comment text (minimum 10 characters, maximum 500).
 - Username (optional; if absent, it will be "Anonymous").
- Comments are displayed in chronological order under each idea.

2.5 Ranking of Ideas

- The system calculates a **ranking of ideas** based on the average score and the number of votes.
- Ideas can be sorted:
 - From the highest to the lowest average score.
 - By the number of votes (in case of the same average score).
 - In chronological order (most recent).

3. Technical Requirements

3.1 Database

The database must contain the following main tables:

1. **Ideas:**
 - Unique ID.
 - Name.
 - Description.
 - Category.
 - Date of creation.
 - Average score.
 - Total number of votes.
2. **Votes:**
 - Unique ID.
 - Idea ID.
 - User ID (optional).
 - Vote value (from 1 to 5).
3. **Comments:**
 - Unique ID.
 - Idea ID.

- Username (optional).
- Comment text.
- Comment date.

3.2 User Interface

- **Homepage:**
 - List of the most voted ideas.
 - Button to add a new idea.
 - Filters for category and sorting.
- **Idea Page:**
 - Complete details of the selected idea.
 - Section to vote.
 - Section to add and view comments.
- **Submission Form:**
 - Fields for name, description, and category.

3.3 Backend

- The system uses a backend to:
 - Manage the submission of ideas.
 - Record votes and comments.
 - Dynamically calculate the average score and ranking.