IMDB DRINKS – RATINGS & REVIEWS REQUIREMENTS

1. Introduction
The "IMDB Drinks" platform aims to let users discover, rate, and review different types of drinks. This section of requirements focuses on how users rate drinks (using star ratings), write reviews (including optional images), handle CAPTCHA validation, and how the system handles guest (not logged in) user behavior.
Note: Searching or filtering for drinks is **out of scope** for this iteration; these requirements strictly address ratings, reviews, and related security/authentication aspects.

2. Glossary
- **Drink**: An item in the database representing a beverage.
- **Star Rating**: A numeric rating from 1 (lowest) to 5 (highest).
- **Review**: A user-submitted text associated with a star rating for a specific drink.
- **Image**: An optional picture a user can attach to a review (e.g., JPEG, PNG).
- **CAPTCHA**: A challenge to verify that a review is submitted by a human, not a bot.
- **Guest User**: A user who is not currently logged in.

3. Stakeholders & Owners
- **Ratings Team**:
  Primarily responsible for implementing the rating logic, review submission, and handling images in reviews.
- **Authentication/Authorization Team (Cross-Team)**:
  Ensures only logged-in users can submit reviews and enforces sign-in flows.
- **Security/Infrastructure Team (Cross-Team)**:
  Provides and maintains CAPTCHA functionality.

4. Functional Requirements
4.1 Rating & Review Submission
FR1: Star Ratings
- **Description**: The system shall allow users to rate each drink using an integer star rating from 1 to 5.
- **Owner**: Ratings Team
- **Verification**:
  - Attempt to submit a rating below 1 or above 5 → System rejects and displays an error.
  - Submit a valid star rating → System accepts and saves the rating.
- **Feasibility**: The database can store an integer value (1–5) for each user–drink rating.

FR2: Text Reviews
- **Description**: The system shall allow users to submit a textual review alongside their star rating.
- **Owner**: Ratings Team

- **Constraints**:
  - Text field must support at least 500 characters.
- **Verification**:
  - Submit textual review → System saves and associates the review with the user and the drink.

FR3: Images in Reviews
- **Description**: The system shall allow users to attach or embed images in their reviews.
- **Owner**: Ratings Team
- **Constraints**:
  - The system must accept common image formats (e.g., JPEG, PNG).
  - A maximum file size (e.g., 5 MB) must be enforced to prevent excessively large uploads.
- **Verification**:
  - Upload an image with valid format and size → System accepts and stores the image.
  - Upload an unsupported format or oversized file → System rejects the upload and displays an error.
- **Rationale**: Enabling images helps users share detailed feedback and visual context of the drinks.

FR4: CAPTCHA for Review Submission (Cross-Team: Security/Infrastructure)
- **Description**: The system shall require the user to successfully solve a CAPTCHA before submitting a new review.
- **Owner**: Ratings Team (implementation trigger) / Security Team (CAPTCHA service)
- **Constraints**:
  - CAPTCHA must be displayed each time a new review form is submitted.
  - If the CAPTCHA is not solved correctly, the review is not saved.
- **Verification**:
  - Submit a review with incorrect CAPTCHA → Review fails to post.
  - Submit a review with correct CAPTCHA → Review is posted successfully.

FR5: Logged-In Users Can Submit Reviews (Cross-Team: Authentication/Authorization)
- **Description**: Only logged-in users shall be able to submit reviews and ratings.
- **Owner**: Ratings Team (front-end check), Auth Team (back-end check)
- **Verification**:
  - A guest user tries to submit a review → System redirects to Sign-In page or displays an error.
  - A logged-in user can submit a review → System processes normally.

4.2 Viewing Reviews
FR6: View Reviews Without Logging In

- **Description**: The system shall allow any user (guest or logged-in) to see the existing reviews for a drink.
- **Owner**: Ratings Team
- **Constraints**:
  - A "View Reviews" button or link is displayed for each drink.
  - If a guest user clicks it, they can read reviews but cannot post.
- **Verification**:
  - Guest user sees reviews page → No "Submit Review" form is shown.
  - Logged-in user sees reviews page → "Submit Review" form is shown.

FR7: Average Star Rating
- **Description**: The system shall calculate and display an average star rating for each drink based on all submitted user ratings.
- **Owner**: Ratings Team
- **Verification**:
  - If a drink has ratings of 5, 3, and 2 → Average is 3.3 (rounded to one decimal or displayed as needed).
  - Display the average rating on the drink's detail page.

4.3 Guest vs. Logged-In Behavior
FR8: Button to See Reviews (Guest)
- **Description**: A "See Reviews" button or link shall be visible even if the user is not logged in, but attempting to add a review triggers the Sign-In flow.
- **Owner**: Ratings Team, Auth Team
- **Verification**:
  - Guest user sees "See Reviews" → Can read existing reviews.
  - Guest user clicks "Add Review" → System prompts for login or sign-in.

5. Non-Functional Requirements (NFR)
NFR1: Performance
- The system shall display drink details and existing reviews within 2 seconds for up to 10,000 drinks in the database.
NFR2: Reliability
- The system shall ensure that reviews (including images) are never lost once submitted. If an error occurs, the user is notified, and the review is not partially saved.
NFR3: Usability
- The star rating widget must be straightforward to use (e.g., clickable stars).
- The CAPTCHA must be user-friendly (e.g., reCAPTCHA or similar).
- Image uploading must provide clear feedback if the file is too large or in an unsupported format.
NFR4: Security
- All review submission endpoints must be protected against spam by CAPTCHA.
- Only authenticated users can alter or delete their own reviews.

- The system must sanitize uploaded images to prevent malicious content.

NFR5: Scalability

- The ratings system must handle up to 1,000,000 total reviews without significantly degrading response times.

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6. Cross-Team Requirements Summary

- **CAPTCHA Integration**
  - **Owner**: Ratings Team → triggers the CAPTCHA on the review form.
  - **Security Team** → provides the CAPTCHA service and verification endpoint.
- **Authentication**
  - **Owner**: Auth Team → ensures login status.
  - **Ratings Team** → checks the user's session before letting them submit a review.

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7. Requirement Traceability & Verification

Req. ID	Title	Verification Method	Owner
FR1	Star Ratings	Unit tests; manual test	Ratings Team
FR2	Text Reviews	Unit tests; manual test	Ratings Team
FR3	Images in Reviews	Manual test; code review	Ratings Team
FR4	CAPTCHA for Review Submission	Integration test w/ Security	Ratings + Security
FR5	Logged-In Users Can Submit	Auth test; manual test	Ratings + Auth
FR6	View Reviews Without Logging In	UI test; manual test	Ratings Team
FR7	Average Star Rating	Unit test (calculation)	Ratings Team
FR8	Button to See Reviews (Guest)	UI test; manual test	Ratings + Auth

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8. Feasibility & Constraints

- **Database**: Must support storing each drink's ratings, text reviews, and any attached images.
- **Time Constraint**: These features must be implemented by the end of the next sprint (two weeks).
- **Legal/Content Moderation**: Since images are allowed, a moderation policy may be required. If images contain inappropriate content, the system must handle or flag them accordingly.

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9. Approval & Sign-Off

All stakeholders have reviewed these requirements. By signing off, each team agrees to implement their respective components and meet the acceptance criteria outlined.

Role/Team	Name/Signature	Date
Ratings Team Lead		2025-03-14
Auth Team		2025-03-14
Security Team		2025-03-14

Role/Team	Name/Signature	Date
Product Owner		2025-03-14

APPROVED BY:RATING & REVIEW TEAM