Food Celebrator API Documentation

Authentication Endpoints

- POST /api/auth/register → Register a new user
- POST /api/auth/login → Log in a user and return a token
- GET /api/auth/me → Get logged-in user data (requires authentication)

User Endpoints

- POST /api/users → Create a new user
- GET /api/users → Fetch all users
- DELETE /api/users/:id → Delete a user by ID

Picture Endpoints

- POST /api/pictures → Create a new picture
- GET /api/pictures → Fetch all pictures
- GET /api/pictures/:pictureId → Fetch a picture by ID
- DELETE /api/pictures/:id → Delete a picture by ID

User-Picture Linking Endpoints

- POST /api/users/:userId/pictures/:pictureId → Link a user to a picture
- GET /api/users/:userId/pictures → Fetch all pictures linked to a user
- DELETE /api/users/:userId/pictures/:pictureId → Unlink a user from a picture
- GET /api/users_x_pictures → Fetch all user-picture links

Username-based Picture Endpoints

- GET /api/username/:username/pictures → Fetch all pictures uploaded by a specific username
- GET /api/username/:username/pictures/:pictureid → Fetch a specific picture by a username and picture ID

Feed Endpoints

- GET /api/feed → Fetch the global picture feed
- GET /api/feed?limit=:limit&offset=:offset → Fetch paginated picture feed

Image Upload Endpoint

 POST /api/upload → Upload an image (performs face detection and object classification before uploading)

Comment Endpoints

- POST /api/createComment → Create a comment on a picture
- PUT /api/editComment → Edit a comment
- DELETE /api/deleteComment → Delete a comment
- GET /api/:pictureId/comments → Fetch all comments for a specific picture

Like Endpoints

- POST /api/createLike → Create a like on a picture
- DELETE /api/deleteLike → Delete a like
- GET /api/:pictureId/likes → Fetch all likes for a specific picture

Bio and Profile Picture Endpoints

- PUT /api/:username/bio → Update user bio by username
- GET /api/:username/bio → Fetch user bio by username
- GET /api/:username/profilepic → Fetch user profile picture number by username
- PUT /api/:username/profilepic → Update user profile picture number by username

Static File Serving

- GET / → Serve the frontend index page
- GET /assets/* → Serve static assets from the frontend build

Further Explanation

POST /api/auth/register

Description: Registers a new user.

- Request Body: JSON object containing:
 - username (string)
 - password (string)
 - email (string)
- Response: Returns the newly created user data.
- **Errors:** May return error details if the input is invalid or the username/email is already taken.

POST /api/auth/login

- **Description:** Authenticates a user and returns a token.
- Request Body: JSON object containing:
 - username (string)
 - password (string)
- Response: JSON object with a token field.
- Errors: Returns error if the username is not found or the password is incorrect.

GET /api/auth/me

- Description: Retrieves data for the logged-in user.
- Headers: Must include an Authorization header with a valid token.
- Response: User data (without password).
- Errors: Returns an error if authentication fails.

2. User Endpoints

POST /api/users

- Description: Creates a new user.
- Request Body: JSON object containing:
 - username (string)
 - password (string)
 - email (string)

- Response: Returns the created user object.
- Errors: Similar to registration errors.

GET /api/users

- Description: Fetches a list of all users.
- Response: JSON array of users (each with id, username, email, and created_at).
- Errors: Returns an error on failure.

DELETE /api/users/:id

- Description: Deletes a user by their unique ID.
- Path Parameter:
 - id (UUID of the user)
- Response: Returns the deleted user record.
- Errors: Returns error if the user is not found.

3. Picture Endpoints

POST /api/pictures

- **Description:** Creates a new picture record.
- Request Body: JSON object containing:
 - URL (string): The URL of the image.
 - caption (string): An optional caption.
- **Response:** Returns the newly created picture object.
- Errors: Returns error details if creation fails.

GET /api/pictures

- Description: Retrieves all pictures.
- Response: JSON array of pictures (with fields like id, URL, caption, and created_at).

GET /api/pictures/:pictureId

- Description: Retrieves a picture by its ID.
- Path Parameter:
 - pictureId (UUID)
- Response: JSON object of the requested picture.
- **Errors:** Returns error if the picture is not found.

DELETE /api/pictures/:id

- Description: Deletes a picture by its unique ID.
- Path Parameter:
 - id (UUID)
- Response: Returns the deleted picture record.
- Errors: Returns error if deletion fails.

4. User-Picture Linking Endpoints

POST /api/users/:userId/pictures/:pictureId

- **Description:** Links a user to a picture (creates an association).
- Path Parameters:
 - userId (UUID)
 - pictureId (UUID)
- Response: Returns the created user-picture link record.
- Errors: Returns error if linking fails.

GET /api/users/:userId/pictures

- Description: Fetches all pictures linked to a specific user.
- Path Parameter:
 - userId (UUID)

- Response: JSON array of pictures associated with the user.
- Errors: Returns error if the user is not found.

DELETE /api/users/:userId/pictures/:pictureId

- Description: Removes the link between a user and a picture.
- Path Parameters:
 - userId (UUID)
 - pictureId (UUID)
- **Response:** Returns the deleted link record.
- Errors: Returns error if the link does not exist.

GET /api/users_x_pictures

- Description: Fetches all user-picture link records.
- Response: JSON array of all links between users and pictures.
- Errors: Returns error if retrieval fails.

5. Username-based Picture Endpoints

GET /api/username/:username/pictures

- **Description:** Fetches all pictures uploaded by a specific username.
- Path Parameter:
 - username (string)
- Response: JSON array containing picture data associated with the username.
- Errors: Returns error if the user is not found.

GET /api/username/:username/pictures/:pictureid

- Description: Fetches a specific picture by a username and picture ID.
- Path Parameters:

- username (string)
- pictureid (UUID)
- Response: JSON object with the picture details.
- Errors: Returns error if no matching picture is found.

6. Feed Endpoints

GET /api/feed

- Description: Retrieves the global picture feed.
- Response: JSON array of feed items (includes picture URL, caption, creation time, associated username, and profile picture number).

GET /api/feed?limit=:limit&offset=:offset

- Description: Retrieves a paginated picture feed.
- Query Parameters:
 - limit (number): The maximum number of items to return.
 - offset (number): The number of items to skip.
- Response: JSON array of feed items.
- Errors: Returns error if limit or offset are invalid.

7. Image Upload Endpoint

POST /api/upload

- **Description:** Uploads an image with several validation steps:
 - Face Detection: Rejects the image if a face is detected.
 - Object Localization: Checks for person objects and rejects if found.
 - Label Detection: Validates labels against allowed labels.
- Request:
 - Content Type: multipart/form-data
 - Fields:
 - image: The image file.

- caption: (Optional) A caption for the picture.
- **Headers:** Must include a valid Authorization token.
- Process:
 - 1. Validates presence of an image and token.
 - 2. Uses Google Cloud Vision API for image analysis.
 - 3. Saves the image temporarily and uploads it to an external server.
 - 4. Creates a picture record and links it to the user.
- Response: JSON object containing a success message, the new picture record, and logs
 of the processing steps.
- Errors: Returns error if image validations fail or if the upload encounters issues.

8. Comment Endpoints

POST /api/createComment

- Description: Creates a comment on a picture.
- Request Body: JSON object containing:
 - user_id (UUID)
 - picture_id (UUID)
 - content (string)
- Response: JSON object with a success message and the created comment.
- Errors: Returns error if comment creation fails.

PUT /api/editComment

- Description: Edits an existing comment.
- Request Body: JSON object containing:
 - comment_id (UUID)
 - content (string): The updated comment text.
- **Response:** JSON object with the updated comment record.
- Errors: Returns error if the comment is not found or the update fails.

DELETE /api/deleteComment

- Description: Deletes a comment.
- Request Body: JSON object containing:
 - comment_id (UUID)
- Response: Returns the deleted comment record.
- Errors: Returns error if deletion fails.

GET /api/:pictureId/comments

- Description: Fetches all comments for a specific picture.
- Path Parameter:
 - pictureId (UUID)
- Response: JSON array of comment records including:
 - User details (user_id, username)
 - Comment content and creation time.
- **Errors:** Returns error if the picture or comments are not found.

9. Like Endpoints

POST /api/createLike

- Description: Creates a like on a picture.
- Request Body: JSON object containing:
 - user_id (UUID)
 - picture_id (UUID)
- Response: JSON object with a success message and the created like record.
- Errors: Returns error if the like cannot be created.

DELETE /api/deleteLike

- Description: Deletes a like.
- Request Body: JSON object containing:
 - like_id (UUID)
- Response: Returns the deleted like record.

Errors: Returns error if deletion fails.

GET /api/:pictureId/likes

- Description: Fetches all likes for a specific picture.
- Path Parameter:
 - pictureId (UUID)
- Response: JSON array containing details of each like including:
 - User information (user_id, username)
 - The like's ID and creation time.
- Errors: Returns error if retrieval fails.

10. Bio and Profile Picture Endpoints

PUT /api/:username/bio

- Description: Updates a user's bio.
- Path Parameter:
 - username (string)
- Request Body: JSON object containing:
 - updatedBio (string)
- Response: Returns the updated bio.
- Errors: Returns error if the user is not found.

GET /api/:username/bio

- **Description:** Retrieves a user's bio.
- Path Parameter:
 - username (string)
- Response: JSON object containing the bio.
- Errors: Returns error if the user is not found.

GET /api/:username/profilepic

- Description: Retrieves the profile picture number for a user.
- Path Parameter:
 - username (string)
- Response: JSON object containing:
 - profile_pic_num (number)
- Errors: Returns error if the user is not found.

PUT /api/:username/profilepic

- **Description:** Updates the profile picture number for a user.
- Path Parameter:
 - username (string)
- Request Body: JSON object containing:
 - profile_pic_num (number)
- **Response:** Returns the updated profile picture number.
- Errors: Returns error if the user is not found.

11. Static File Serving

GET /

- Description: Serves the frontend index page.
- Response: HTML page (the client-side application).

GET /assets/*

- Description: Serves static assets (e.g., JavaScript, CSS, images) from the frontend build.
- Response: Returns the requested static file.