Sequence Diagram: Review an Event

This sequence diagram models four key review-related scenarios:

- Successfully submitting a review
- Editing a submitted review
- Deleting a review
- Attempting to submit a review without a rating

It shows interactions between the user, GUI components, the controller, and the database layer.

Scenario 1: Successfully Submitting a Review

Participants:

- `User`
- `ViewEventDetailsGUI`
- `ReviewGUI`
- `PopUpMessageGUI`
- `ReviewController`
- `ProxyDB`
- `Review`

Flow:
The user starts by selecting an event within the event details interface. Once an event is selected, the system displays the review GUI, allowing the user to provide feedback. The user enters a star rating and may optionally provide written comments, images, or videos. Upon clicking the submit button, the review GUI performs a local validation to ensure a rating has been selected. If validation is successful, the GUI creates a review object and sends it to the review controller. The controller forwards this object to the proxy database layer, which creates and stores a new review entry. Once stored, the system updates the user interface to reflect the submitted review.

Scenario 2: Editing a Submitted Review

Participants:

- `User`
- `ReviewGUI`
- `ReviewController`
- `ProxyDB`

- `Review`

Flow:
The user accesses a previously submitted review through the review GUI. They modify the review by editing the text, attached media, or rating. When the user submits the updated review, the GUI sends the new review data to the review controller. The controller forwards the data to the proxy database, which updates the corresponding review entry. The updated content is then reflected on the user interface.

Scenario 3: Deleting a Submitted Review

Participants:

- `User`
- `ReviewGUI`
- `PopUpMessageGUI`
- `ReviewController`
- `ProxyDB`

Flow:
The user navigates to an existing review using the review GUI and selects the option to delete it. This action triggers a confirmation dialog through the popup message interface. The system presents the user with two options. If the user confirms the deletion, the review controller receives the request and instructs the proxy database to remove the review entry. If the user cancels the operation, the dialog simply closes and no changes are made.

Scenario 4: Submitting a Review Without a Rating

Participants:

- `User`
- `ReviewGUI`
- `PopUpMessageGUI`

Flow:
In this scenario, the user attempts to submit a review without providing a star rating. After the user presses the submit button, the review GUI performs local validation. When it detects the missing rating, the validation fails. The GUI then triggers the popup message interface to display an error message indicating that a rating must be provided. The review is not submitted, and the controller is never contacted.

Component Roles

- The user initiates all review-related interactions.
- The event details GUI is responsible for presenting event content and linking to the review submission interface.
- The review GUI manages review input, validation, and interactions with the controller.
- The popup message GUI is used for displaying confirmations and error dialogs.
- The review controller processes validated review data and communicates with the database.
- The proxy database layer handles review persistence operations.
- The review entity represents the structured review data that is stored or modified.
- The `update()` method is believed to be an internal function of every GUI component in app development and is used in this case to showcase that the ui is being refreshed after the database operation.