1DV508 - Project Course in Computer Science
Analysis and Requirements

Project description:
The goal of the project it to create a timeline management application. It should contain an edit mode, and a display mode for viewing, adding, deleting, and modifying timelines containing "events" that have a time and may or may not have a duration.

Project Members(7):
Hägg Robin (Project manager)
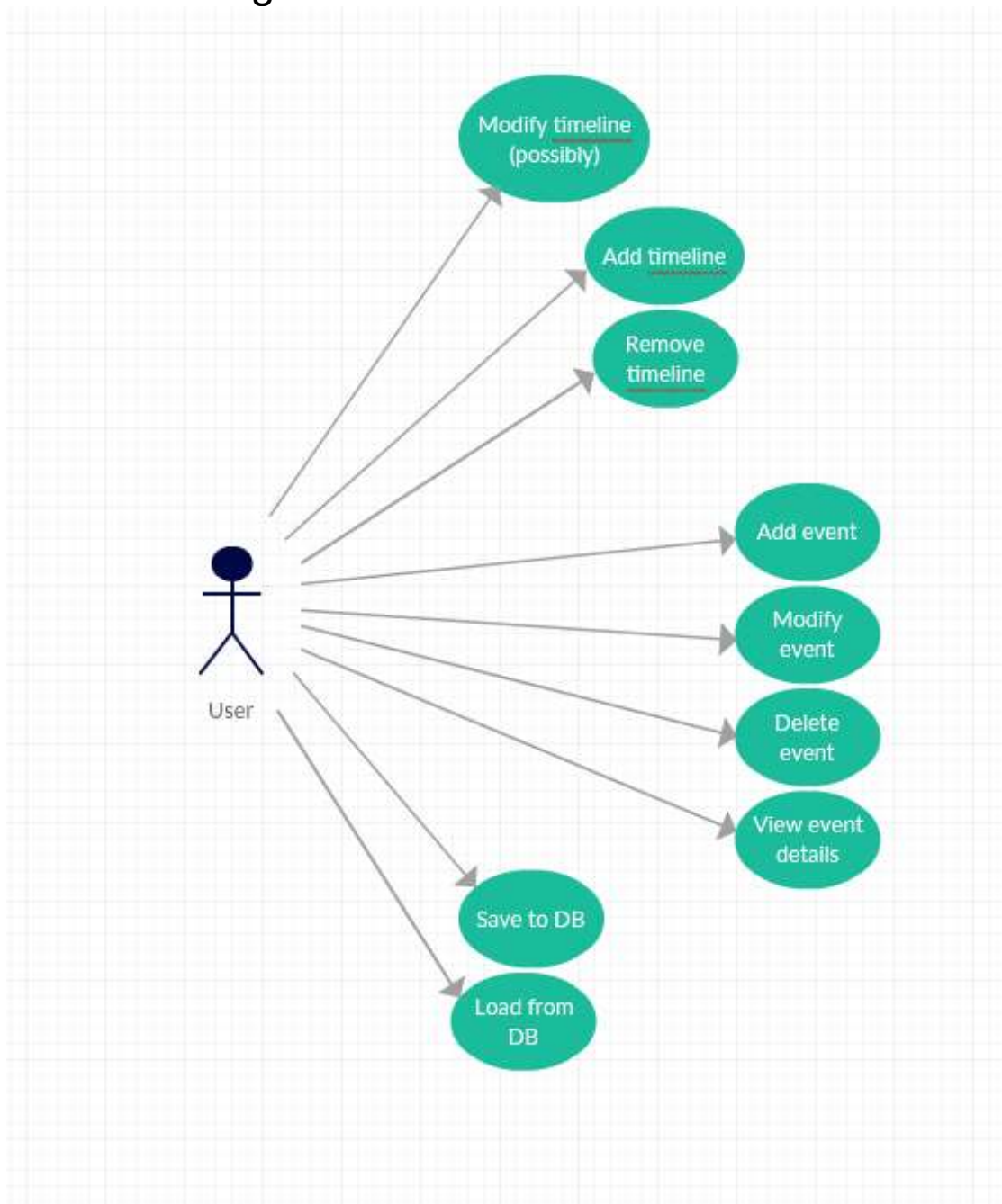Dirnfeld Ruth
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Github repository: https://github.com/rd222dv/Project

Use-case diagram:

Use-case specifications:

Use Case: **Modify timeline** (possibly)
Actors: User
Description: The User has installed the timeline app, chooses to modify the timeline and saves it afterwards
Preconditions: has the timeline app
Main flow:
- clicks on the "modify timeline" button
- User modifies what he wants
- clicks save
- modified timeline is shown
Postcondition: The timeline was successfully modified
Exceptions: validate range, end cannot be before start

Use Case: **Add timeline**
Actors: User
Description: The User has installed the timeline app, chooses to add a timeline and saves it afterwards
Preconditions: has the timeline app
Main flow:
- clicks on the "new timeline" button
- User enters details in displayed fields
- clicks save
- modified timeline is shown
Postcondition: The timeline was successfully added and displayed
Exceptions: validate range, end cannot be before start

Use Case: **Remove timeline**
Actors: User
Description: The User has installed the timeline app and chooses to remove the timeline
Preconditions: has the timeline app
Main flow:
- clicks on the "remove timeline" button
- Are you sure you want to delete this timeline + Yes or No options pop up
- confirm to delete
- timeline is deleted
Postcondition: The timeline was successfully deleted
Exceptions: none

Use Case: **Add event**
Actors: User
Description: The User has installed the timeline app and chooses to add an event to the timeline
Preconditions: has the timeline app
Main flow:
- clicks on the "new event" button
- User enters details in displayed fields (title / text / duration)
- clicks save
- modified timeline is shown
Postcondition: The timeline was successfully modified and the event added
Exceptions: validate range, end cannot be before start

Use Case: **Modify event**
Actors: User
Description: The User has installed the timeline app and chooses to modify an event in the timeline
Preconditions: has the timeline app and created an event
Main flow:
- clicks on the "modify event" button
- User modifies details in displayed fields (modify title / text / duration)
- clicks save
- modified timeline is shown
Postcondition: The event was successfully modified in the timeline
Exceptions: validate range, end cannot be before start

Use Case: **Delete event**
Actors: User
Description: The User has installed the timeline app and chooses to delete an event from the timeline
Preconditions: has the timeline app and created an event
Main flow:
- clicks on the "delete event" button
- Are you sure you want to delete this event + Yes or No options pop up
- clicks delete
- the event was deleted
Postcondition: The event was successfully deleted from the timeline
Exceptions: none

Use Case: **View event details**
Actors: User
Description: The User has installed the timeline app and chooses to view the event details
Preconditions: has the timeline app and created an event
Main flow:
- clicks on the event
- details are displayed (title / text / duration)
Postcondition: The event was successfully displayed
Exceptions: none

Use Case: **Save to file**
Actors: User
Description: saving info to the file
Precondition: App is open
Main flow:
- press save
- select where to save
- click ok
Postcondition: The file has been written
Exceptions: none

Use Case: **Load from file**
Actors: User
Description: loading info from the file
Precondition: App is open
Main flow:
- press load (verify that you really want to load if there has been changes in the timeline already open)
- select where to load from
- click ok
Postcondition: timelines and events have been loaded from file and are displayed in the app
Exceptions: none

Requirements

Edit Mode - Timelines

ID	
A1	Add a new timeline with start and end time
D1	Delete a complete timeline
M1	Modify a timeline (might bring problems with start/end time and events that are outside the new range of the timeline, requirement might be dropped)

Edit Mode - Events

ID	
A2	Add event to timeline (with title, description and time)
A2.1	Add non-duration event to timeline
A2.2	Add event with duration to timeline
D2	Delete event on a timeline
M2	Modify title, description, time for any event

Display Mode

ID	
V1	All timelines shown simultaneously including events
V2	Event titles should be visible
V3	Duration events should take up space corresponding to their duration on the timeline
V4	Clicking on an event should bring up a pop-up with all details
V5	The user shall be able to scroll horizontally and/or vertically if all timelines cannot fit in the display window.

General

ID	
G1	Save and load timelines
G2	Data persistence through SQL db or a simple file (CSV or similar)