

# **Blackboard Calendar Project Requirements**

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Participants: Jae Choi, Max Tighe, Zachary McCann, Vladimir Ventura, Christian Chung

## **1 Functionality**

The system will provide features to add, remove, and edit calendars and events, as well as set notifications.

1. Events will have a title, a date on which they occur, an optional duration, and an optional description.
  - 1.1. The system allows the user to create events.
    - 1.1.1. The user must enter the attributes of the new event.
      - 1.1.1.1. The user must enter the time at which the event occurs.
        - 1.1.1.1.1. The user may optionally enter the duration of the event.
      - 1.1.1.2. The user may specify if the event repeats.
        - 1.1.1.2.1. The event may be set to repeat yearly, monthly, weekly, and daily.
      - 1.1.1.3. The user must enter a title for the event.
        - 1.1.1.3.1. If the title is left blank, the new event's title will be "untitled event".
        - 1.1.1.3.2. Duplicate titles among events are not allowed.
    - 1.1.2. The user may delete the events they have created.
      - 1.1.2.1. The user must not be allowed to delete events created by classes they are currently taking.
  2. The user can edit existing events.
    - 2.1. The user may edit the time at which the selected event occurs, and the duration.

- 2.1.1. The user will not be allowed to leave the time of occurrence blank.
  - 2.2. The user may edit the title of the event.
    - 2.2.1. The user is not allowed to leave the title field blank.
  - 2.3. The user may optionally edit the description of the event.
  - 2.4. The user cannot edit existing events created by classes they are currently taking.
- 3. Assignments are events created by the classes of which the user is a member.
  - 3.1. Assignments possess a title, due date, and description.
  - 3.2. Assignments cannot be deleted or edited by users.
- 4. Calendars will have a title, a color, and events assigned to it.
  - 4.1. The user can create and delete calendars.
    - 4.1.1. Calendars are created for each class the user is taking.
      - 4.1.1.1. Each calendar contains the assignments and events that belong to their respective classes.
    - 4.1.2. The user may add new events to calendars they have created.
    - 4.1.3. The user must enter a title for the new calendar.
      - 4.1.3.1. Duplicate titles among calendars must not be allowed.
      - 4.1.3.2. If the title is left blank, the new calendar's title will be "untitled calendar".
    - 4.1.4. The user must enter a color for the new calendar.
      - 4.1.4.1. The user is not allowed to leave this field blank.
      - 4.1.4.2. Events placed in the calendar will be displayed with the calendar's color.
    - 4.1.5. The user may delete calendars they have created.
      - 4.1.5.1. The user will not be allowed to delete calendars created by classes they are currently taking.
      - 4.1.5.2. Upon deletion, the events contained therein will also be deleted.
        - 4.1.5.2.1. The system will ask the user if they wish to select and keep any events in the calendar before deletion.

- 4.1.5.2.1.1. If so, the user must specify to which calendar the desired events will be moved.
  - 4.1.6. By default, a personal calendar is created for the user.
    - 4.1.6.1. Events created by the user are assigned to this calendar by default.
      - 4.1.6.1.1. The user can choose to place the event into another calendar they have created.
- 4.2. The user can edit existing calendars.
  - 4.2.1. Users can change the color associated with a particular calendar.
  - 4.2.2. The user can change the title of the calendar.
    - 4.2.2.1. The user will not be allowed to leave this field blank.
    - 4.2.2.2. If the new title the user wishes to use is already used by another calendar, the user will be forced to select a different name.
  - 4.2.3. Events can be transferred from one calendar to another.
    - 4.2.3.1. The user cannot transfer the event to a class's calendar.
    - 4.2.3.2. The user cannot move any events from a class's calendar to another calendar.
  - 4.2.4. Calendars created by classes that a user is taking can only have their color changed.
- 5. The user can set email and text notifications.
  - 5.1. Notifications can be enabled or disabled based on chosen calendars.
  - 5.2. Notifications can be enabled or disabled for individual events and assignments.
  - 5.3. The user can select any particular upcoming event or assignment for which they can set notifications.
    - 5.3.1. The user can change the amount of time prior to the event or the assignment they will be notified.
      - 5.3.1.1. The chosen notification time must be a future time before the event begins, or the assignment's due date.
  - 5.4. The user can choose to be notified via text message, email, or both.

- 5.5. The user can create repeating reminder notifications.
  - 5.5.1. The user will specify the amount of time between repeating reminders.
- 6. The user can save calendars.
  - 6.1. The user can save a file or printed copy of the current calendar, or both.
    - 6.1.1. The saved copy will include the events and assignments within the selected calendar(s).
    - 6.1.2. Users can select certain days or months to save.
    - 6.1.3. Users can specify and filter which entries to include.

## **2 Main Calendar Display**

The main calendar display consists of visual components the user will be able to view.

- 1. The main calendar display shows every day of the current calendar month by default.
  - 1.1. The main calendar display shows the name of the current month.
  - 1.2. The user can choose between three display modes- daily, weekly, and monthly.
    - 1.2.1. Daily mode displays an hourly view of the currently selected day.
      - 1.2.1.1. It will display all selected events in the hour of the day they occur.
    - 1.2.2. Weekly mode displays the days of the currently selected week.
      - 1.2.2.1. It displays all selected events on the days they occur.
    - 1.2.3. Monthly mode provides a simultaneous view of every day of the current calendar month.
      - 1.2.3.1. It displays all the selected events occurring on each day.
  - 1.3. The user can toggle different calendars to be displayed.
- 2. The main calendar display presents assignments and other events at the time at which they occur.

- 2.1. The user can click on assignments and events to display further information.
- 2.2. Submitted assignments appear differently from unsubmitted assignments.
  - 2.2.1. Submitted assignments are marked as complete with a check mark icon.
- 2.3. Graded assignments display their grades in the calendar.
  - 2.3.1. The user can show or hide displayed grades of graded assignments.
- 2.4. The user can filter the displayed assignments and events by one or more criteria.
  - 2.4.1. The user can hide finished assignments upon completion.
- 2.5. The main calendar display will automatically update and refresh based on changes made to events and assignments, including creation and deletion.
- 2.6. The user can navigate between different dates on the calendar.
- 2.7. The main calendar display will dynamically change its display proportions based on the current resolution.