

Module: CalendarFragment

1. Purpose: To display an interactive calendar with a dynamically colored background for every day.
2. Inputs: No direct inputs, however the display relies on local variables `tasks_display` and `mood_display` to correctly show the calendar. Equivalence classes:
 - a. `tasks_display = true; mood_display = false`
 - b. `tasks_display = false; mood_display = false`
 - c. `tasks_display = true; mood_display = true`
 - d. `tasks_display = false; mood_display = true`
3. Results:
 - a. Background color is displayed behind applicable days
 - b. The calendar alone is displayed with no decoration
 - c. Background color is displayed behind applicable days
 - d. Background color is displayed behind applicable days and the mood face is displayed behind applicable days

Function: `public void setDayColors()`

1. Purpose: To iterate through the database of stored days and color their backgrounds when appropriate.
2. Inputs: No inputs, relies entirely on the external database `doneenessHistory` and `database.moodHistory`. Equivalence classes:
 - a. The combined databases contain no valid days
 - b. The combined databases contain ≥ 1 valid day
3. Results:
 - a. `setDayColor` is never called
 - b. `setDayColor(day_year)` is called for every valid `day_year` in the databases

Function: `public void setDayColor(String day_year)`

1. Purpose: To color in the background of a given `day_year` by creating an `EventDecorator`.
2. Inputs: A `day_year` string that corresponds to a value in `database.doneenessHistory` and/or `database.moodHistory`. Equivalence classes:
 - a. `day_year` is a valid string in `doneenessHistory`
 - b. `day_year` is a valid string in `moodHistory`
 - c. `day_year` is a valid string in `doneenessHistory` and `moodHistory`
3. Results:
 - a. The background color is set for the specific `day_year`
 - b. The background mood face is set for the specific `day_year`
 - c. The background color and mood face is set for the specific `day_year`

Module: EventDecorator

1. Purpose to properly decorate applicable days with background drawables.

2. Inputs: A int day_of_year and drawable dayBG are inputted to the class declaration to be stored for later access. These inputs are guaranteed to be valid due to the checks done by setDayColors() and the drawable provided by setDayColor(). Equivalence classes:
 - a. Both day_of_year and dayBG are non-null
3. Results:
 - a. Local variables properly set

Function: public boolean shouldDecorate(String day_year)

1. Purpose: To verify the given day_year is equal to the stored day_of_year value.
2. Inputs: A day_year string that corresponds to a calendar day. Equivalence classes:
 - a. day_year is equivalent to day_of_year
 - b. day_year is not equivalent to day_of_year
4. Results:
 - a. return true
 - b. return false

Function: public boolean shouldDecorate(DayViewFacade day)

1. Purpose: To set the background drawable of a given day.
2. Inputs: A day object that has a settable background drawable:
 - a. day is a valid DayViewFacade
3. Results:
 - a. The background of day is set to the stored dayBG