**Software Design Document**

**Version 1.1**

**November 12th, 2017**

**Student Calendar Integration Application**

**BYU-Idaho CS364 Software Engineering**

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**Revision History**

| **Name** | **Date** | **Reason for Changes** | **Version** |
| --- | --- | --- | --- |
| Initial | 11/4/2017 | First Draft | 1.0 |
| Draft | 11/12/2017 | Second Draft | 1.1 |

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**1.0 Introduction**

**1.1 Purpose**

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**1.2 Scope**

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**1.3 Context**

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**1.4 Summary**

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**1.5 References**

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**2.0 Glossary**

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**3.0 Use Cases**

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**3.1 Identified Stakeholders and Design Concerns**

**3.1.1 Calendar Manager**

**3.1.1.1 Information**

The Calendar Manager is a user who works with student tasks, events, assignments, reminders, etc. There are several users who fall into the Calendar Manager category. Each user can perform similar actions, but for different reasons. For example, a teacher may want to highlight a test deadline for his or her students. A student may want to set reminders about a test or homework deadline throughout the week. 3.1.1.1.1 Teacher 3.1.1.1.2 Event Coordinator 3.1.1.1.3 Student

**3.1.2 Student Calendar**

**3.1.2.1 Information**

The Student Calendar represents the system and the actions it takes.

**3.1.3 Administrative**

**3.1.3.1 Administrative User Information**

The Administrative User is a user who oversees account creation and administration.

**3.1.4 Public User**

**3.1.4.1 Public User Information**

The Public User is a generic user to represent the general user. They have been validated through the security measures and created a personal Student Calendar account.

**3.2 List of Use Cases**

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**3.3 Use Case Diagrams**

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####3.3.1 Login Use Cases: login

| **Data** | **Description** |
| --- | --- |
| ScreenShot/Mockup: |  |
| Page Title: | Login |
| Parent User Story: | N/A |
| Actor(s)/Persona(s): | BYUI Student or Professor |
| Pre-conditions/Product(s) Required: | 1. The user has created an account.  2. The user has navigated to the login page. |
| Post-conditions/Product(s) Produced: | 1. The user is now logged in.  2. The calendar application now reflects the user's information and upcoming events. |
| Links: | None. |
| Description/Notes: | 1. The application will provide e-mail address and password fields for authentication.  2. A user enters their username and password into the corresponding fields.  3. The user clicks the LOGIN button.  4. The user's credentials are verified via database query, and the user is presented with their calendar. |
| Security: | 1. The password will be salted and hashed before entered into the database.  2. The database will feature sanitized inputs to prevent SQL injection. |

**3.4 Use Cases**

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**4.0 Design Overview**

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**4.1 System Architecture**

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**4.2.0 Design Viewpoint 1**

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**4.2.0.1 Design View 1**

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**4.2.0.2 Design Rationale**

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**4.3 System Interfaces**

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**4.4 Constraints and Assumptions**

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**5.0 Data Design**

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**5.1 Entity Relationship Diagram**

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**5.2 Internal Software Data Structure**

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**5.3 Global Data Structure**

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**6.0 User Interface Design**

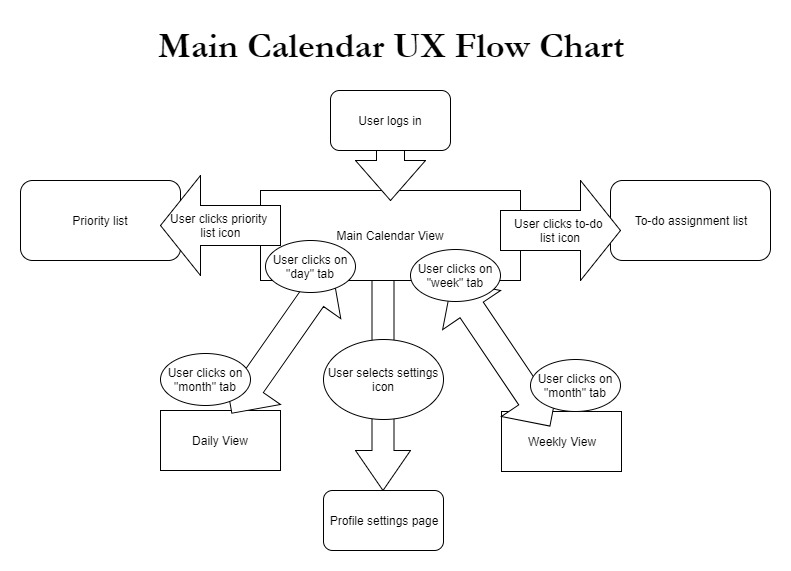
Content goes here: Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa qui officia deserunt mollit anim id est laborum.

**6.1 Description of User Interface**

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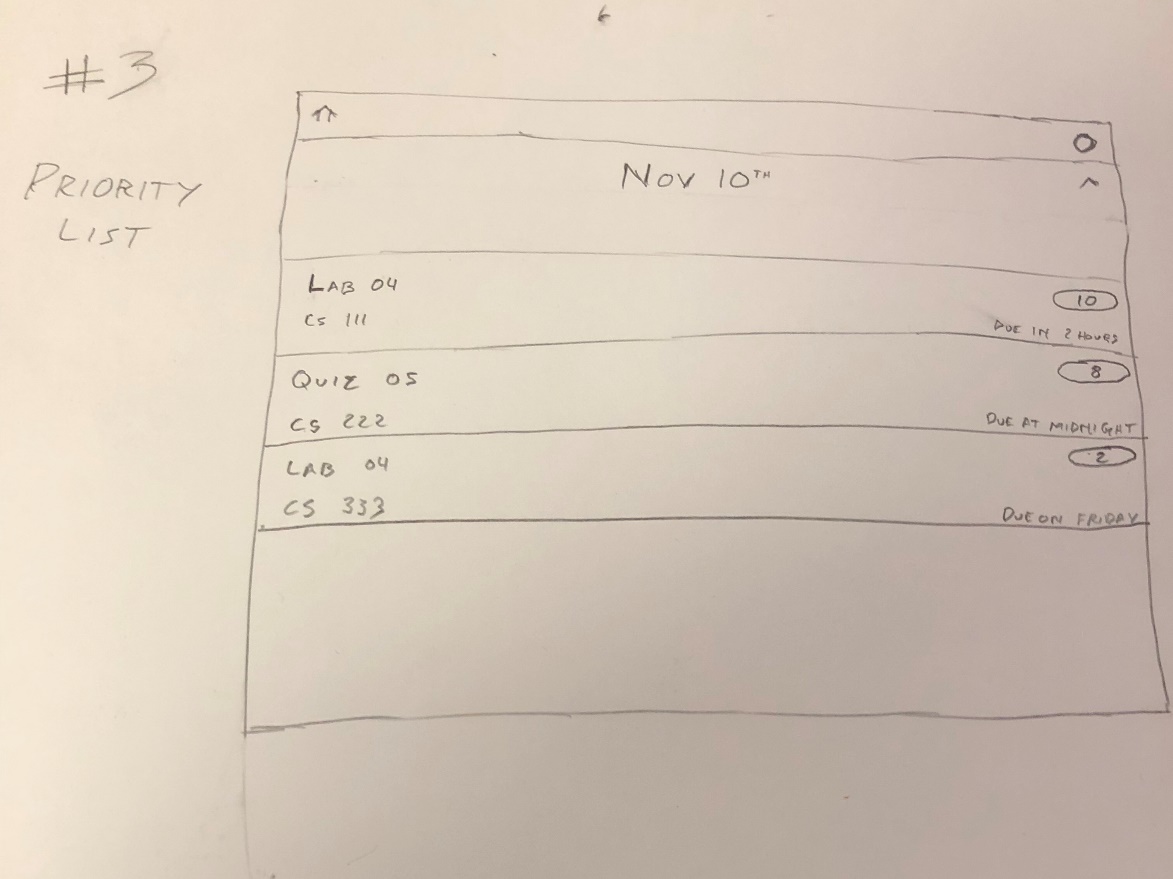
**6.2 User Interface Images**

**6.2.1 Main Calendar View UX flow chart**

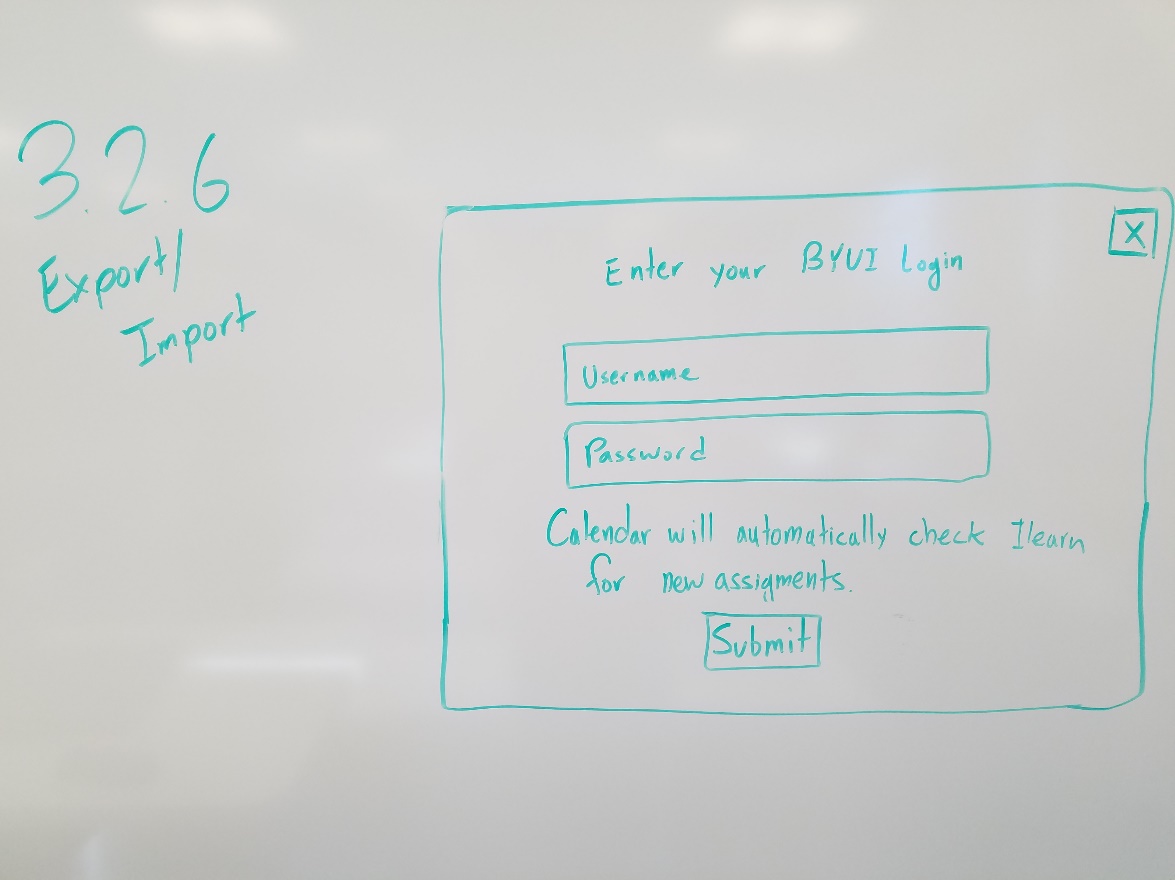
[](https://github.com/MCLifeLeader/CS364/blob/master/SDD/resources/Main%20Calendar%20UX%20Flow%20chart.jpg)

**Description:This image displays which features of the student calendar application are associated with the Main Calendar view and how the user can navigate between the pages.**

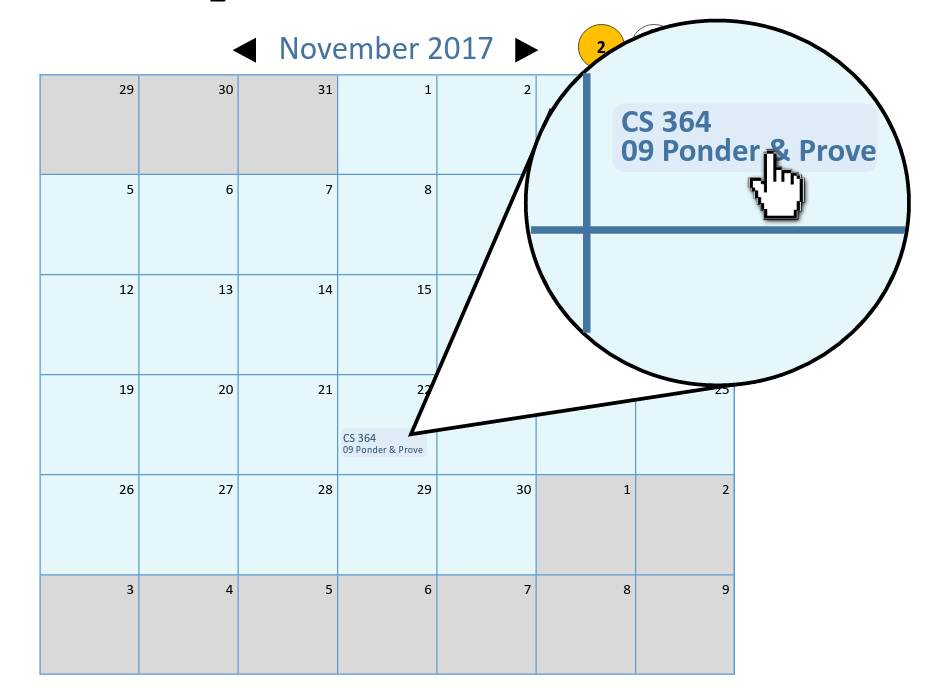
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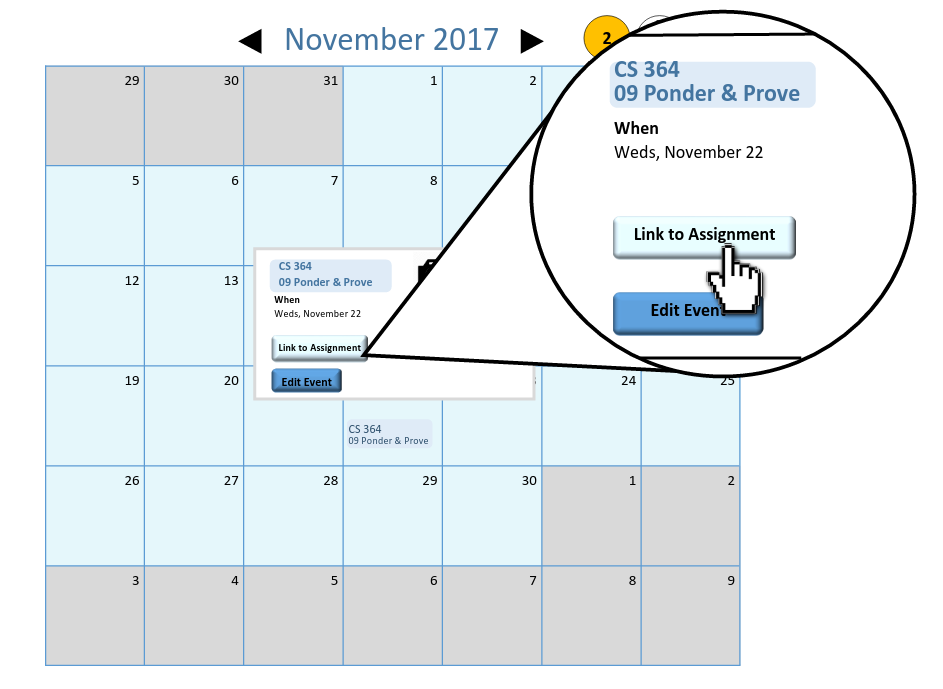
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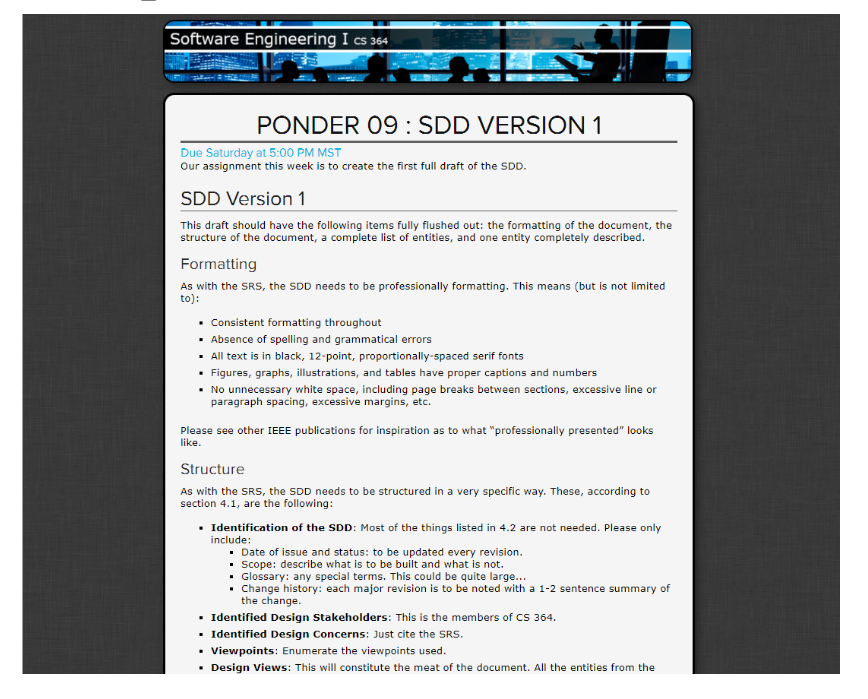
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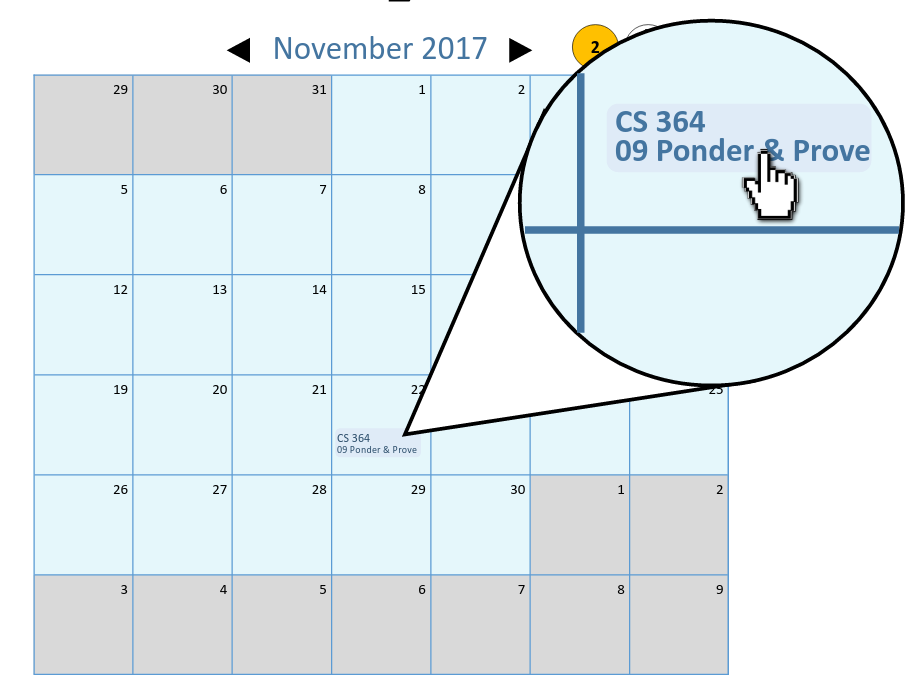
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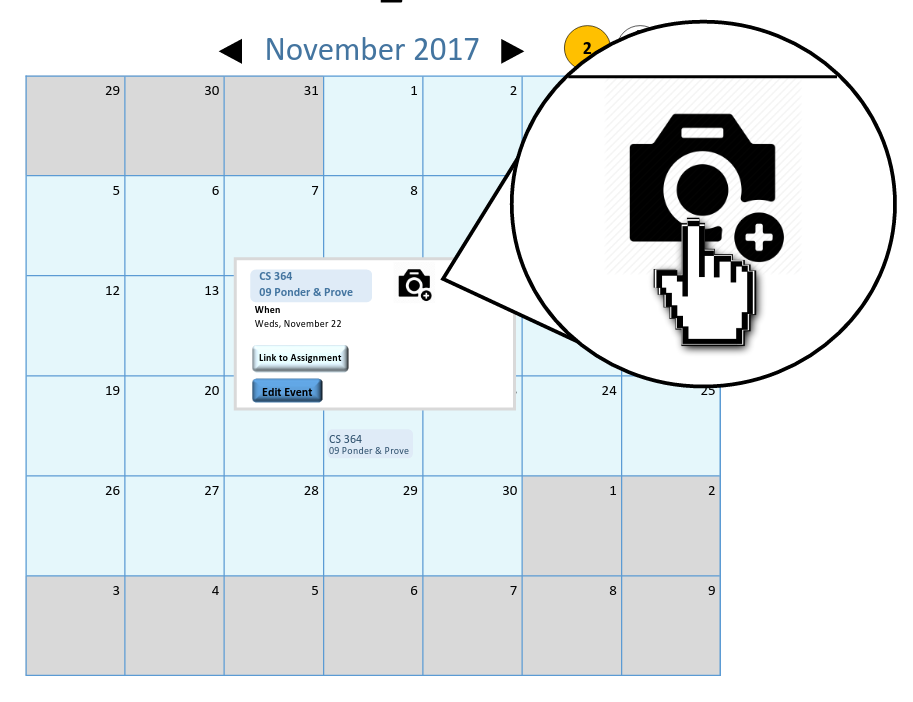
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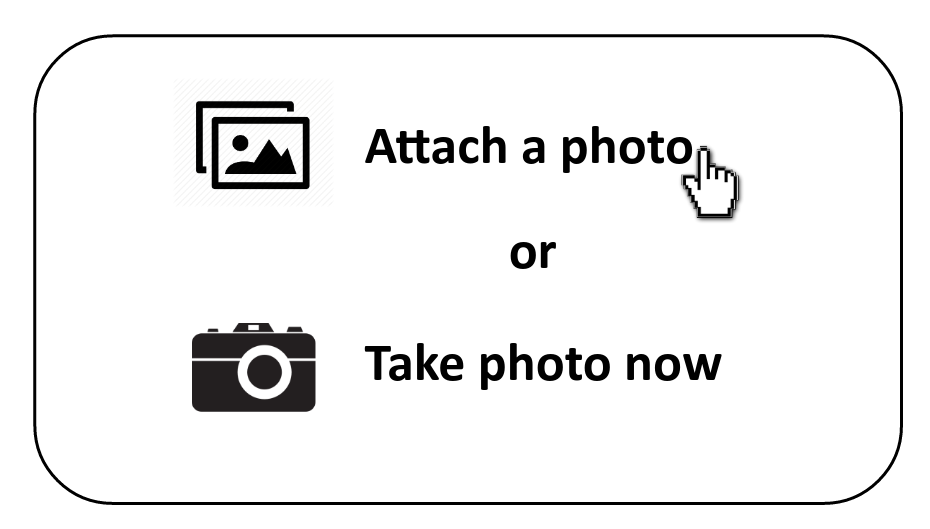
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[](https://github.com/MCLifeLeader/CS364/blob/master/SDD/resources/3.2.8.2.png)

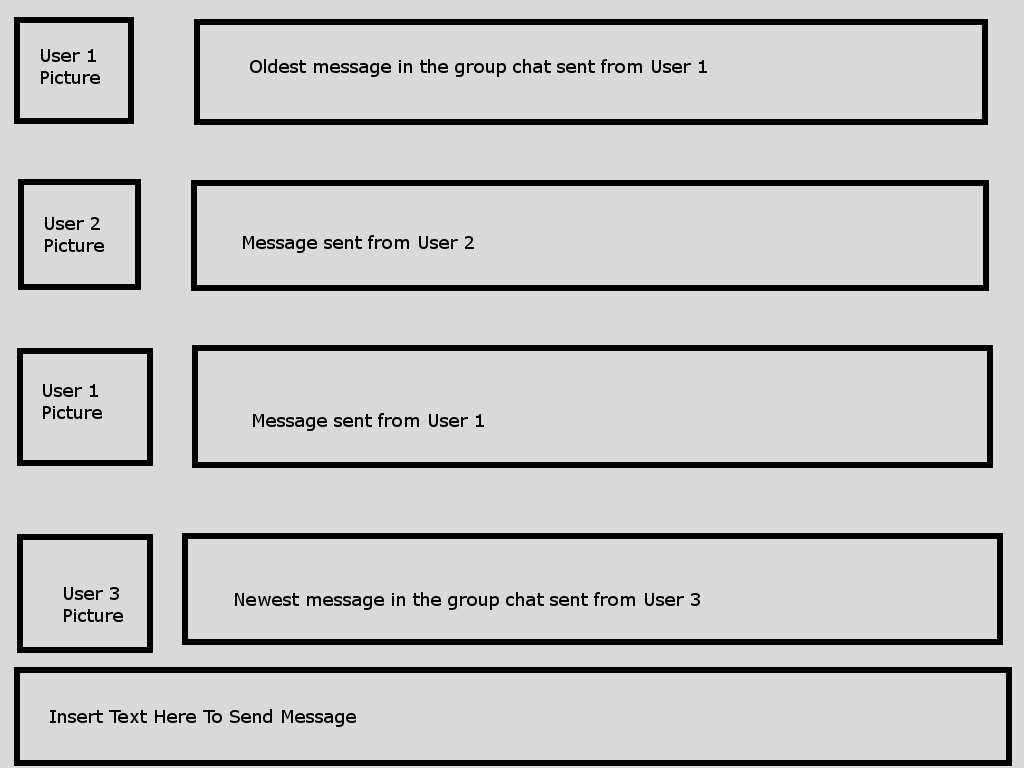
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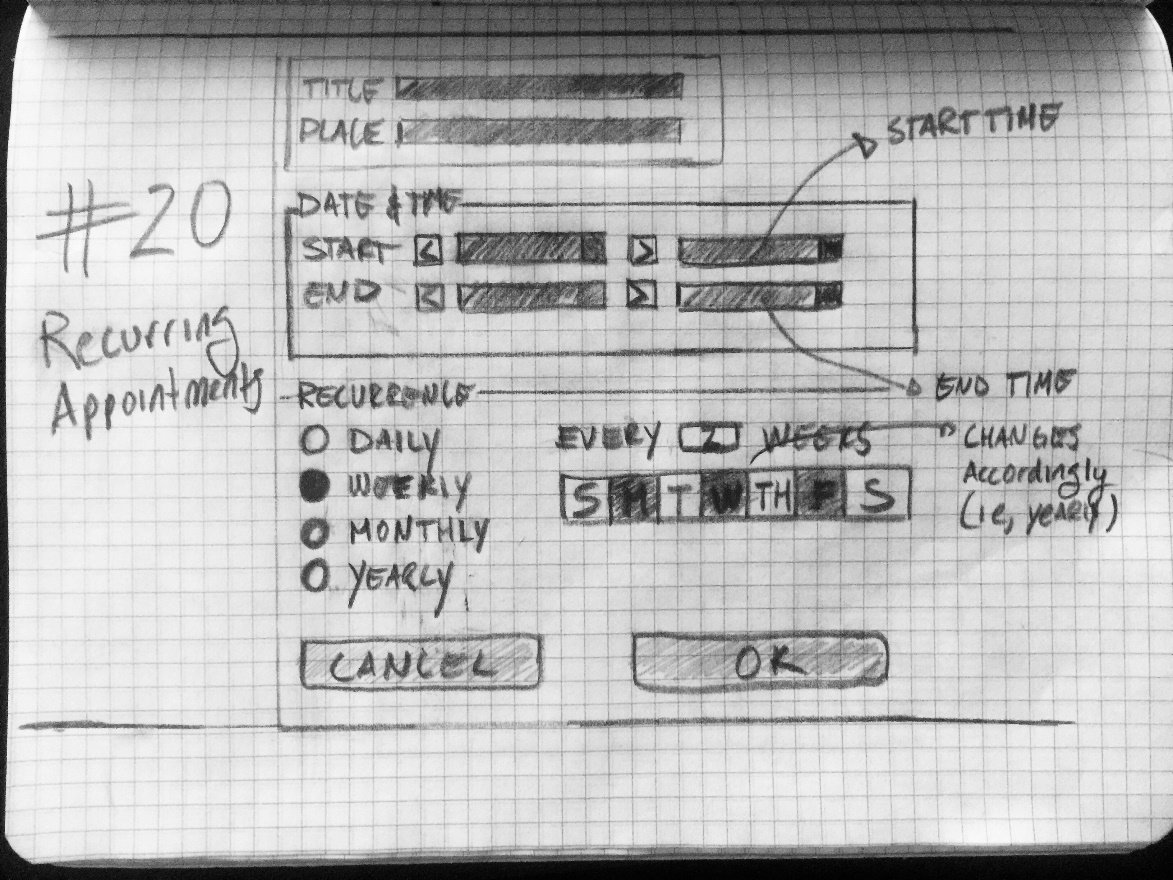
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[](https://github.com/MCLifeLeader/CS364/blob/master/SDD/resources/3.2.9.2.png)

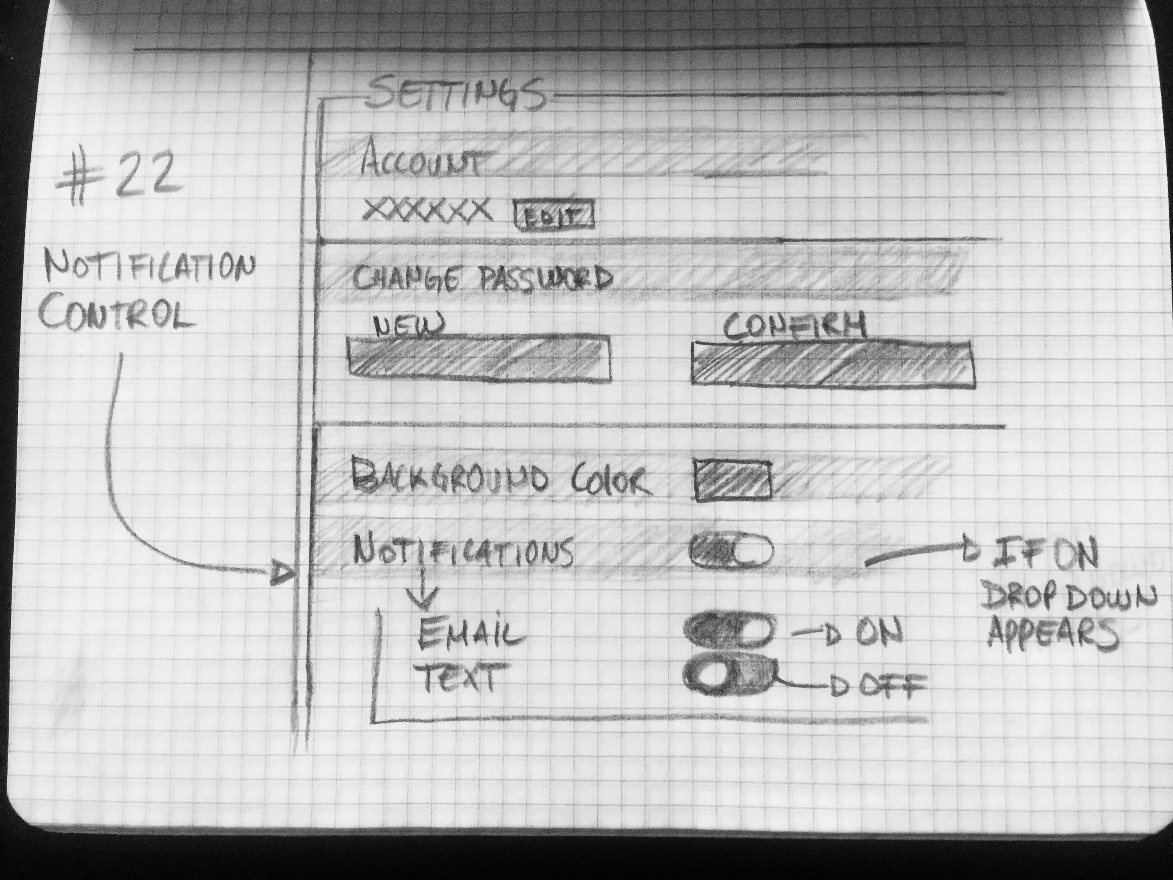
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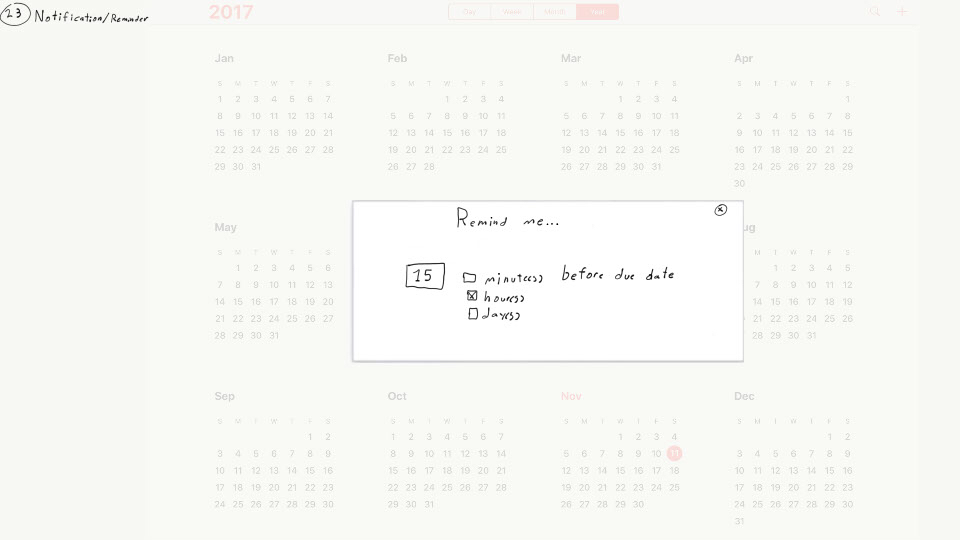
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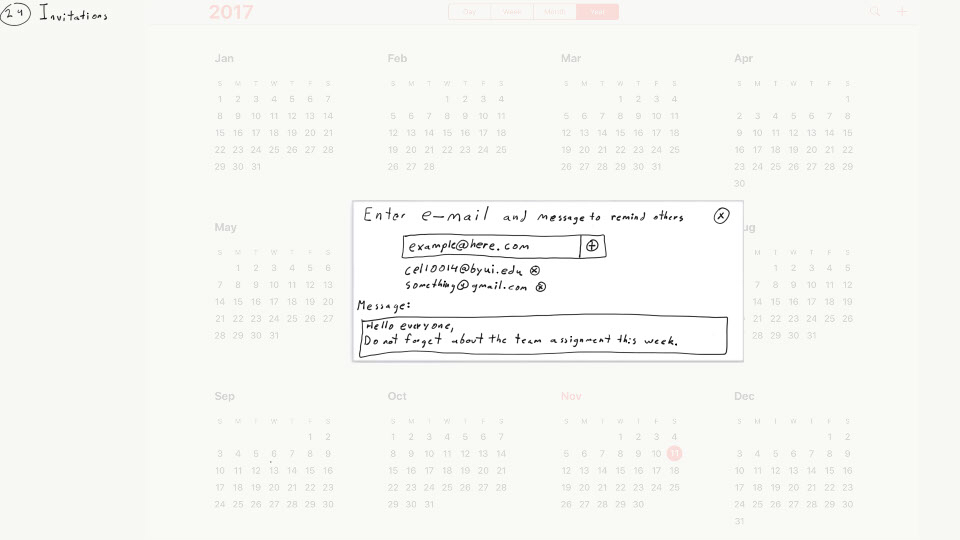
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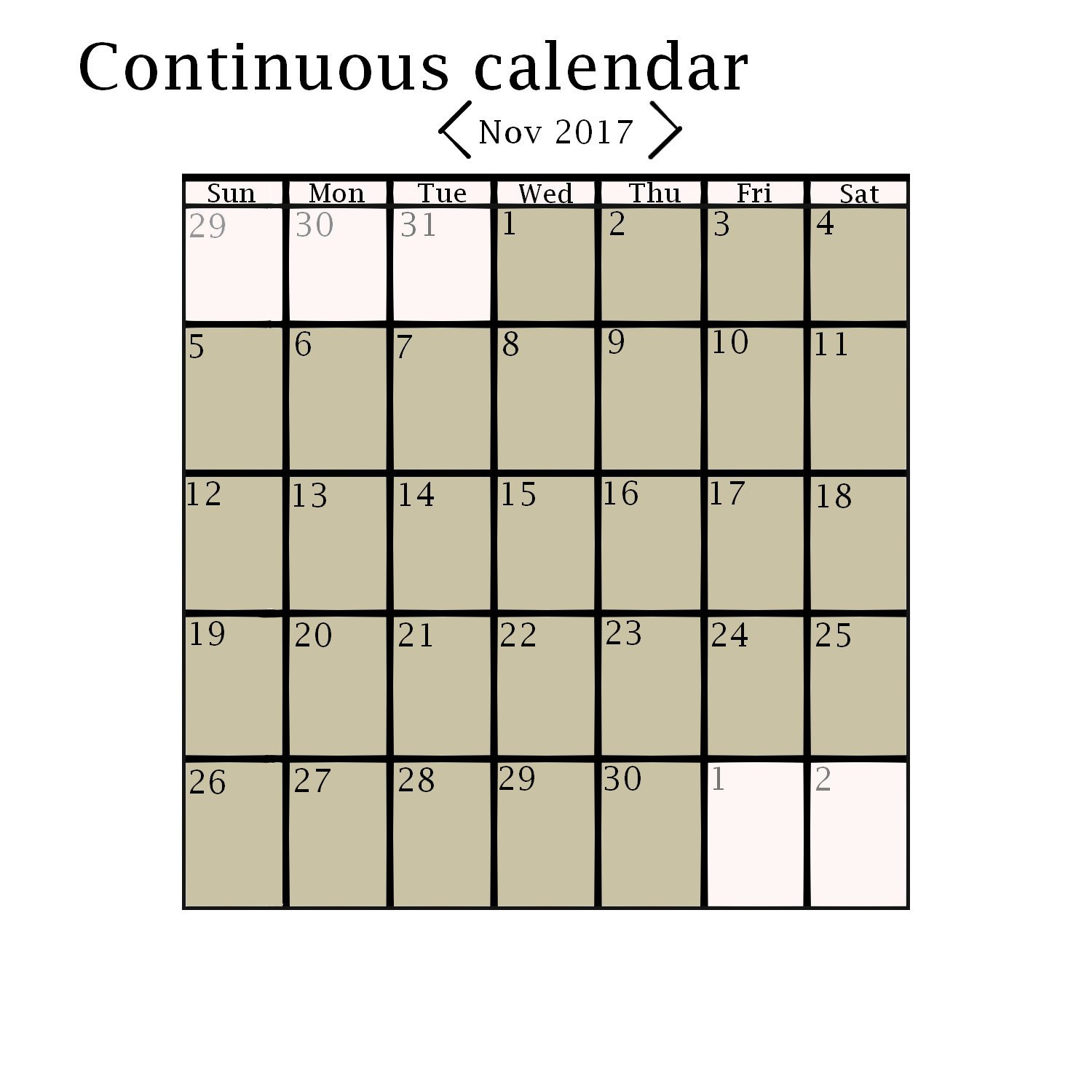
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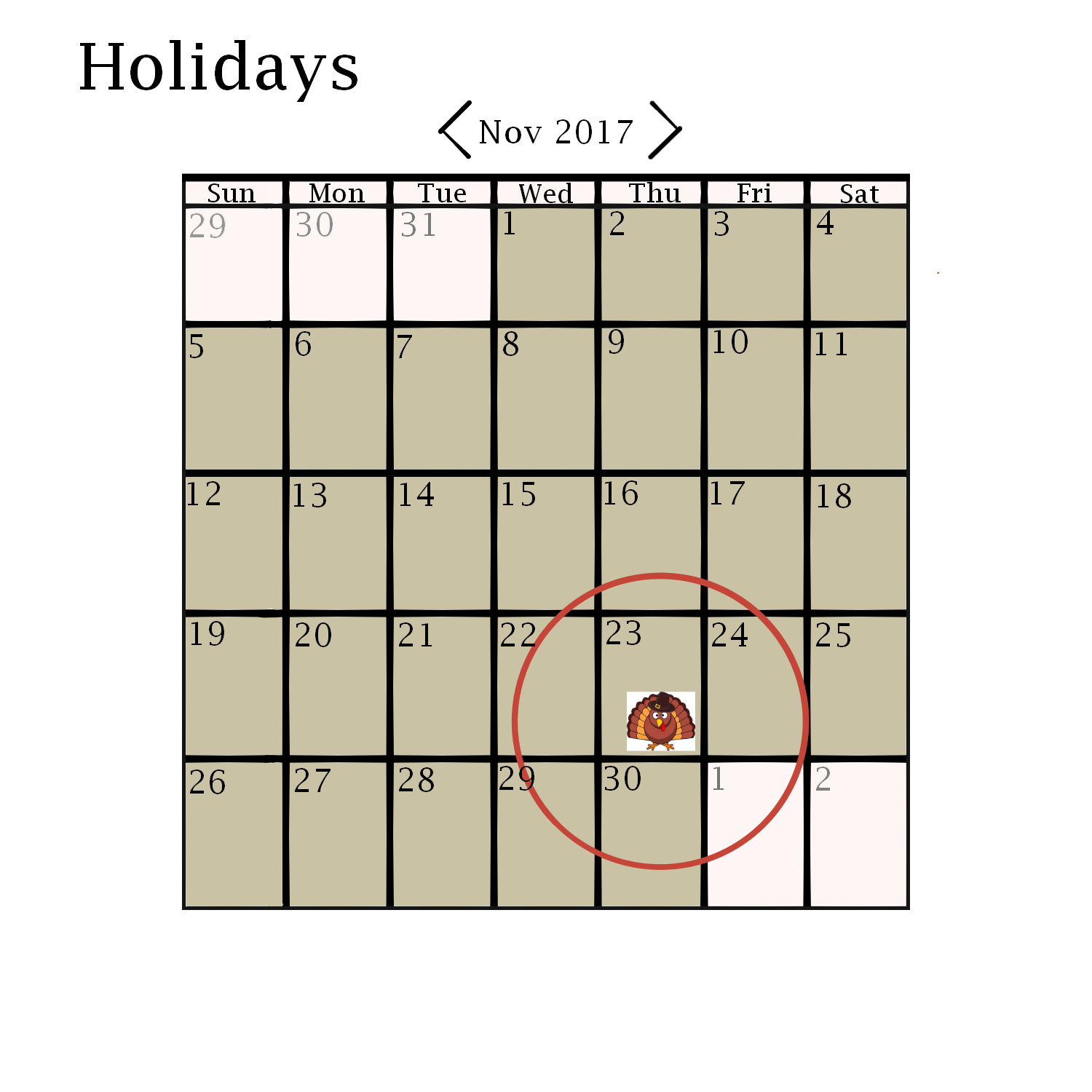
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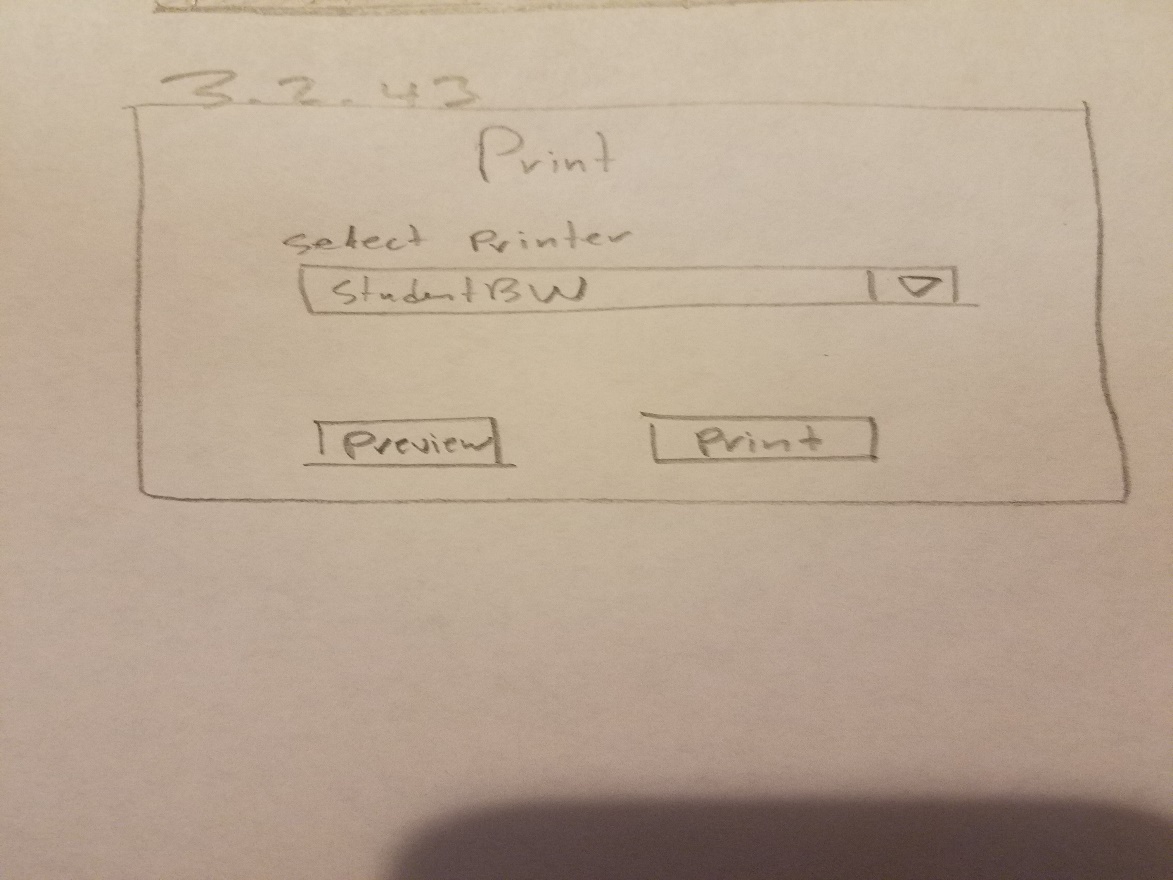
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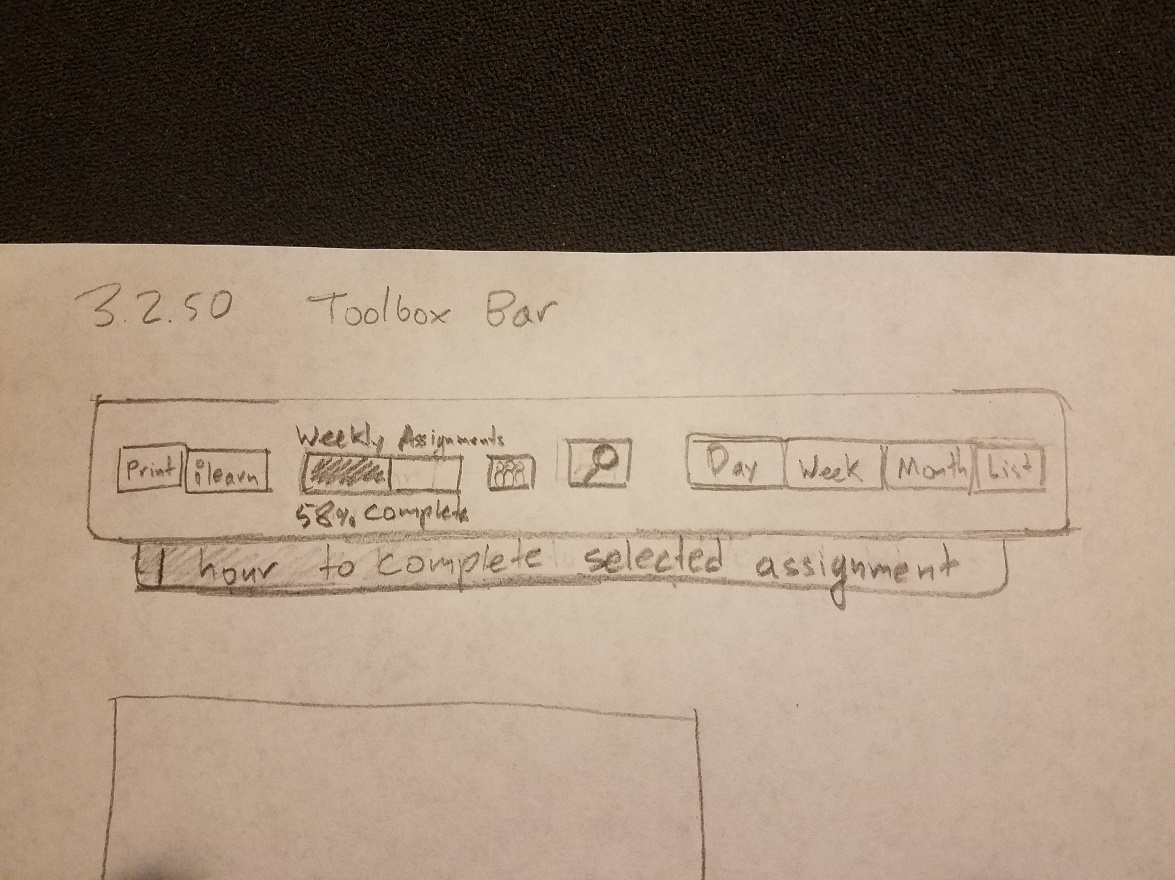
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6.2.43.0

[](https://github.com/MCLifeLeader/CS364/blob/master/SDD/resources/3.2.43.0.jpg)

6.2.50.0

[](https://github.com/MCLifeLeader/CS364/blob/master/SDD/resources/3.2.50.0.jpg)

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