

# Perfect Timing

The Impastas

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# Overview

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## Target Audience: Students

- Busy college students have difficulty managing their time
- Planning for assignments is hard

## Proposed Solution: Crowdsourcing

- Assignment time can be tracked and used by others

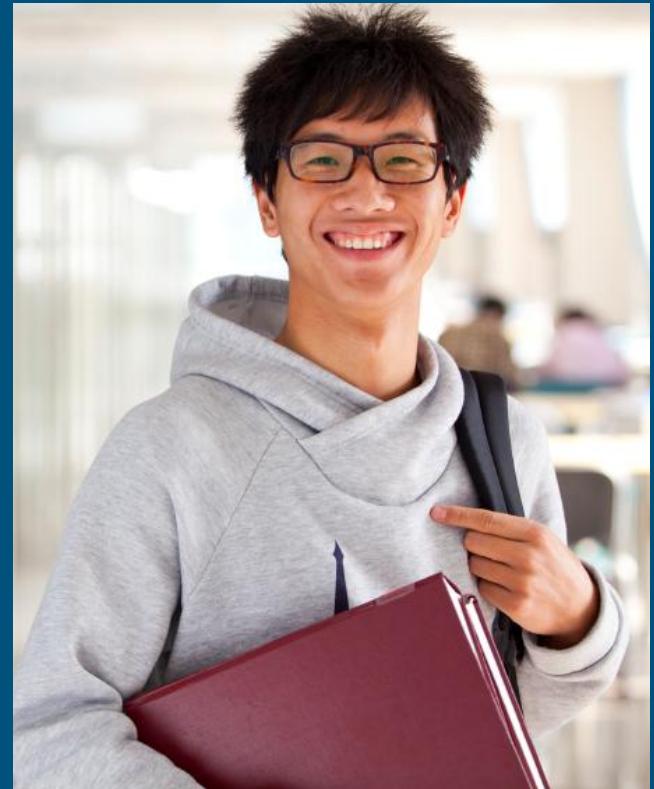


# Overview

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## Primary Tasks

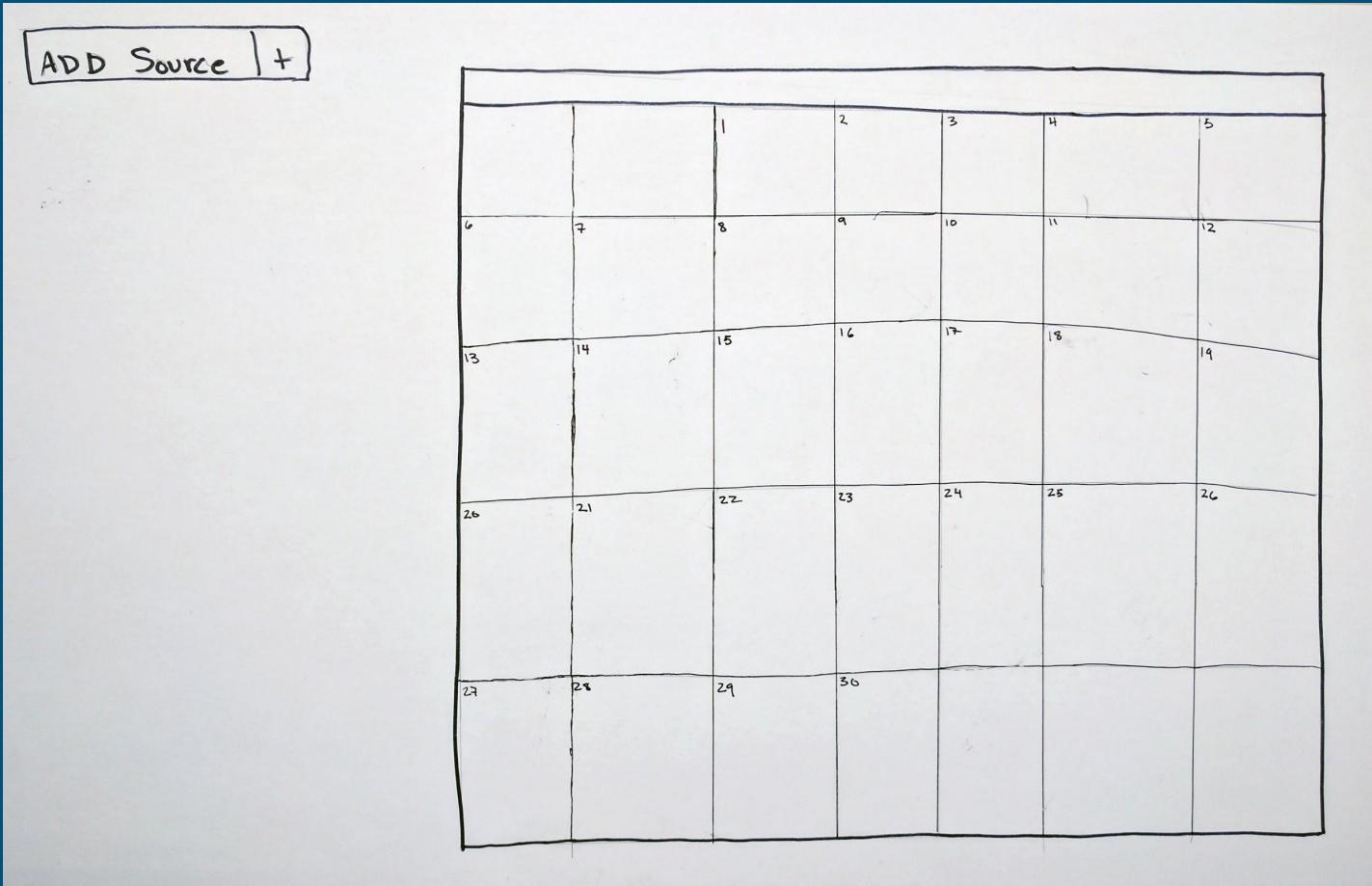
- Schedule from a list of tasks
- Determine time to allot for a task



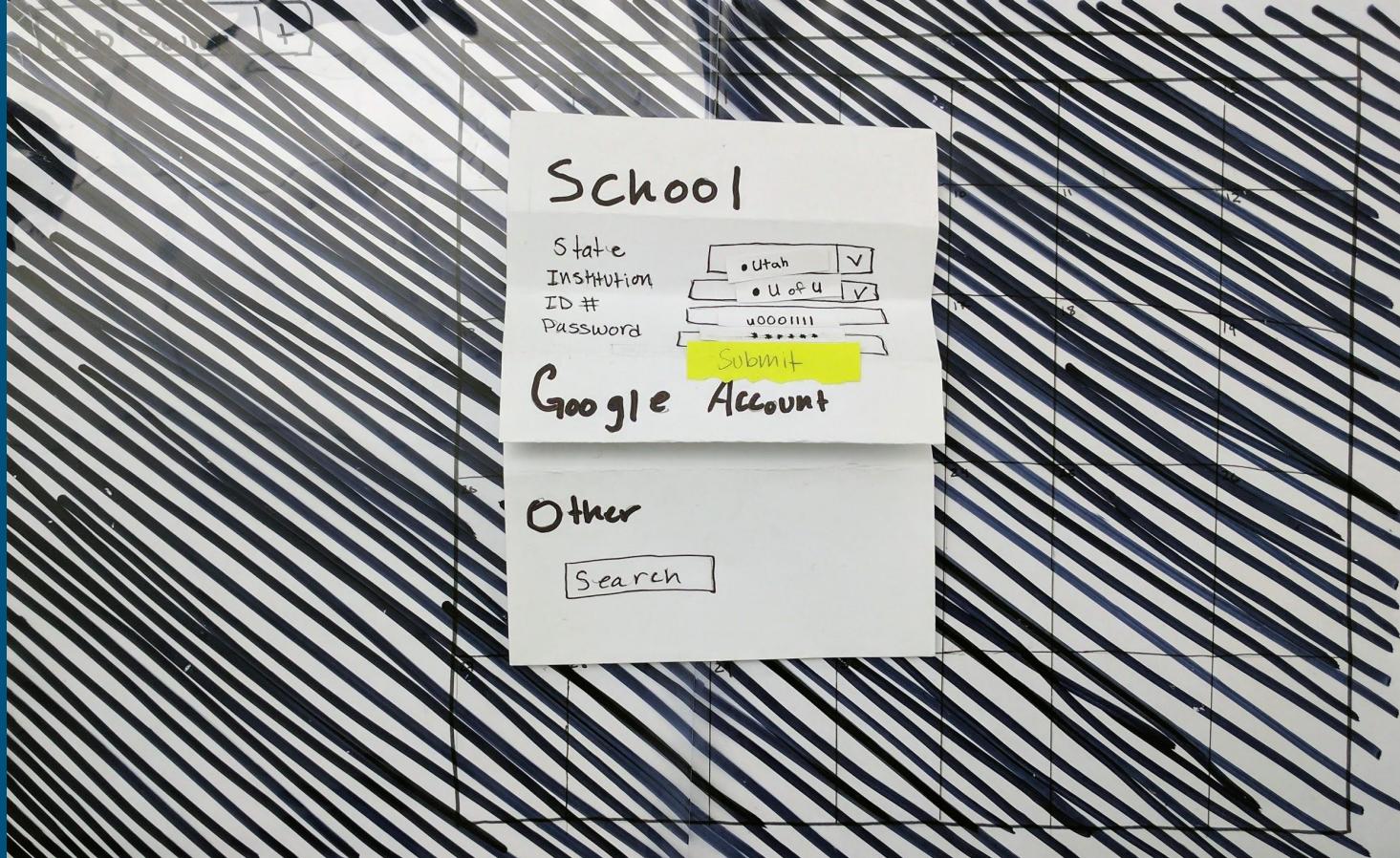
# Preliminary Task:

## Import Class Schedule from Calendars

# Initial Paper Prototype



# Initial Paper Prototype



# Initial Paper Prototype

The image shows a paper prototype of a calendar application. On the left, a blue sticky note lists tasks for 'University of Utah' under 'Class 1' and 'Class 2'. On the right, a 4x7 grid calendar is shown with numbered days from 1 to 36. Some days contain handwritten notes indicating due dates for assignments and readings.

		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18 • Assignment 1 Due	19
20	21	22 • Reading 1 Due - Hw 1 DUE	23	24	25 • Assignment 2 Due	26
27	28	29 - Quiz 1 Due	30			

**ADD Source +**

- University of Utah
  - \* Class 1
    - HW 1 [Schedule](#)
    - Quiz 1 [Schedule](#)
    - Reading 1 [Schedule](#)
  - \* Class 2
    - Assignment 2 [Schedule](#)
    - Assignment 1 [Schedule](#)

# Main Task:

## Plan Out an Upcoming Assignment

# Initial Paper Prototype

Class 2

Assignment 1

Statistics for this assignment

Hours Spent	Average	F
Grade	Average	8+

Overall Course Statistics

Hours Spent	Average	5
Grade	Average	B-

Personal Statistics

Hours Spent	Average	6
Grade	Average	B+

Priority

Percent of grade	5%
Select a Priority	V

\* required

Recommendations

Change

Accept & Schedule

# Initial Paper Prototype

Class 2

Assignment 1

Statistics for this assignment

Hours Spent	Average	7
Grade	Average	3+

Overall Course Statistics

Hours Spent	Average	5
Grade	Average	B-

Personal Statistics

Hours Spent	Average	6
Grade	Average	B+

Priority

Percent of grade

Select a Priority  Medium  Low  High

Recommendations

Total time : 7 hours  
November 10 : 2 PM - 5 PM  
November 14 : 6 PM - 8 PM  
November 15 : 5 PM - 7 PM

Priority: Medium

# Initial Paper Prototype

ADD Source +						
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30			

● University of Utah

- Class 1
  - HW 1 [Schedule](#)
  - Quiz 1 [Schedule](#)
  - Reading 1 [Schedule](#)
- Class 2
  - Assignment 2 [Schedule](#)
  - Assignment 1 [Schedule](#)

● Assignment 1  
6 - 8 PM

● Assignment 1  
5 - 7 PM

● Assignment 1 Due

● Assignment 2 Due

● Assignment 2 Due

● Quiz 1 Due

# **Sub Task:**

## Change a Plan

# Initial Paper Prototype

Class 1  
Reading 1

Statistics for this assignment

Hours Spent	Average
[Bar]	2.5

Grade	Average
[Bar]	A

Overall Course Statistics

Hours Spent	Average
[Bar]	7

Grade	Average
[Bar]	A-

Personal Statistics

Hours Spent	Average
[Bar]	7.5

Grade	Average
[Bar]	A-

Priority

Percent of grade	1%
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Select a Priority  \*required

Recommendations

Change

# Initial Paper Prototype



# Initial Paper Prototype

The image shows a hand-drawn paper prototype of a calendar application. On the left, a blue sticky note contains a header "ADD Source | +". Below it is a list of tasks for two classes:

- University of Utah
  - Class 1
    - HW 1 [Schedule](#)
    - Quiz 1 [Schedule](#)
    - Reading 1 [Schedule](#)
  - Class 2
    - Assignment 2 [Schedule](#)
    - Assignment 1 [Schedule](#)

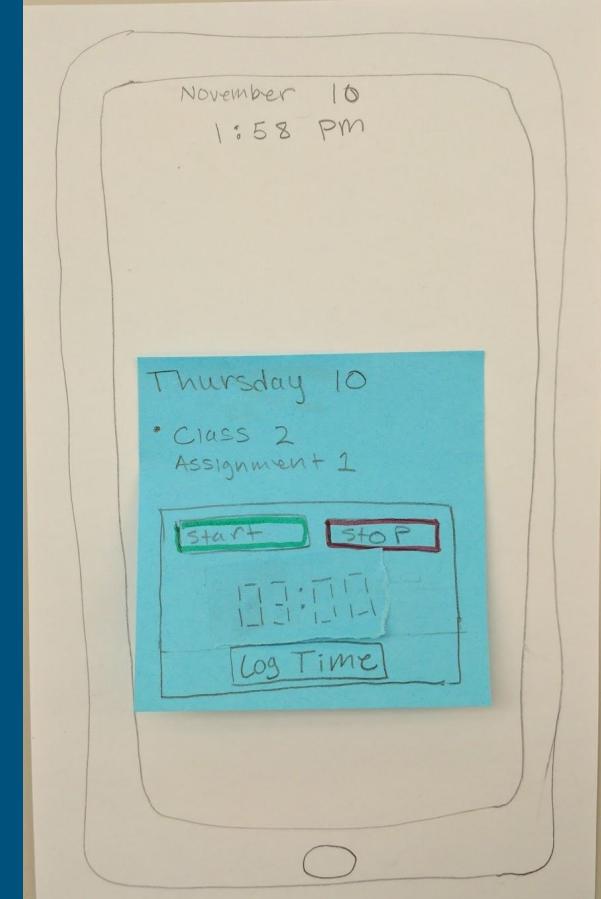
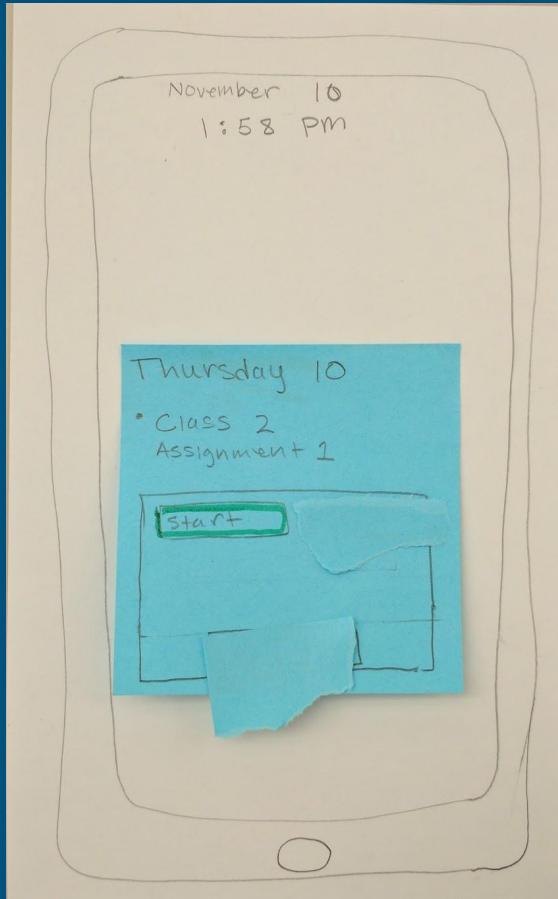
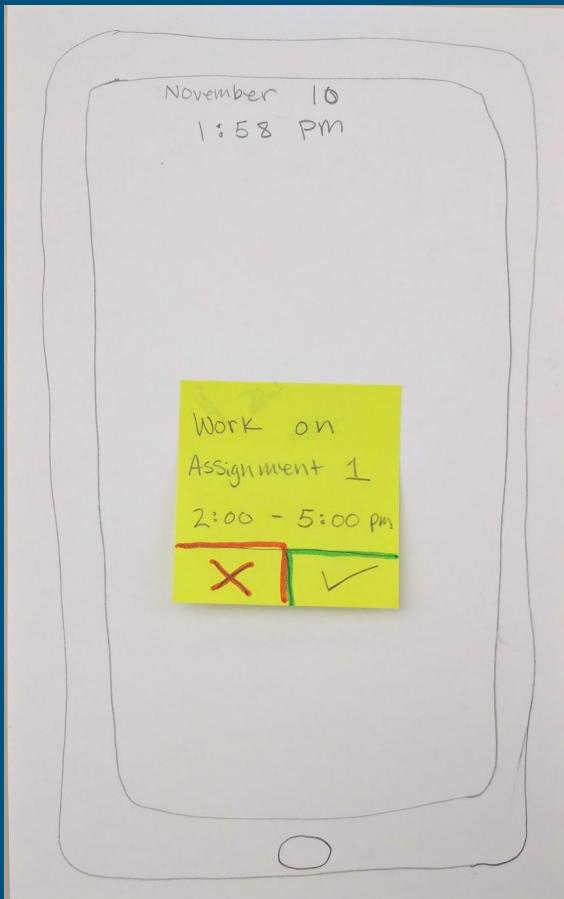
To the right is a large grid calendar. The columns are labeled 1 through 5 at the top. The rows are labeled with dates: 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30. Specific tasks are listed in the grid:

  - Row 10, Column 10: • Assignment 1 1-2-5
  - Row 14, Column 14: • Assignment 1 6-8 PM
  - Row 15, Column 15: • Assignment 1 5-7 PM
  - Row 18, Column 18: • Assignment 1 DUE
  - Row 21, Column 21: • Reading 1 4-6 PM
  - Row 22, Column 22: • Reading 1 DUE - HW1 DUE
  - Row 25, Column 25: • Assignment 2 DUE
  - Row 29, Column 29: - QUIZ 1 DUE

# **Additional Task:**

## Time Yourself with the Mobile App

# Initial Paper Prototype



# Testing Process

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## Tasks

- Import Canvas calendar
- Plan with auto recommendations
- Plan with manual recommendations
- Track your time with the mobile companion app



# Testing Process

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## **Communications Student**

- Imported Google calendar for assignments

## **CS - Early Major Student**

- Wasn't sure how to log in to institution

## **CS - Late Major Student**

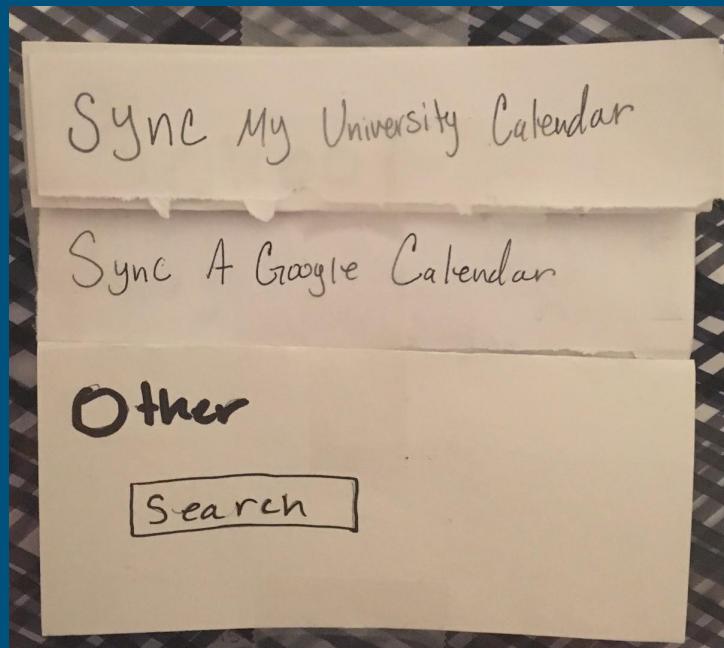
- Unclear what 'sources' meant
- Cancelling actions lost existing data



# Major Changes

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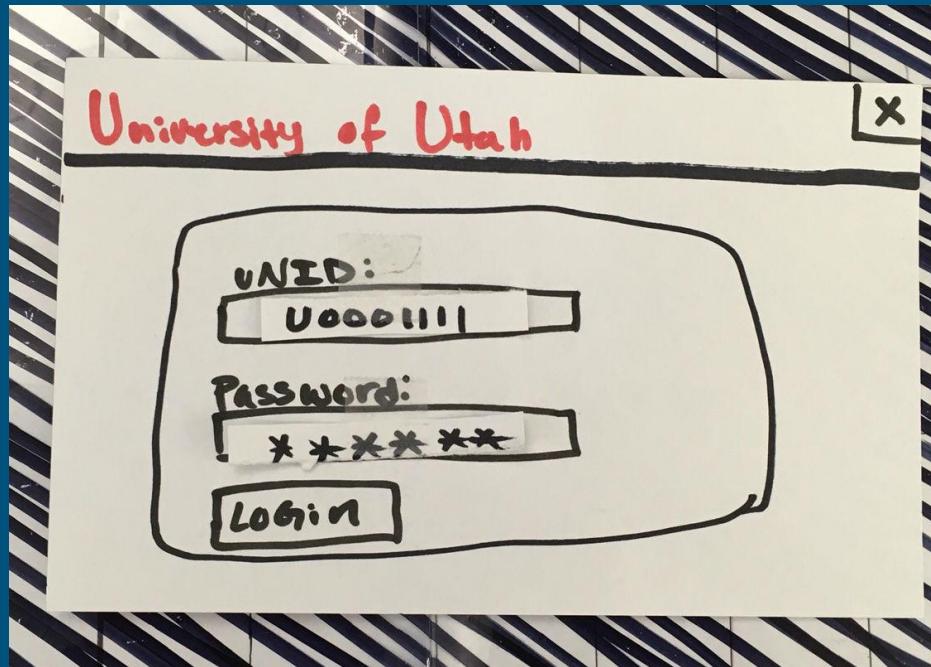
Sync labels made more clear



# Major Changes

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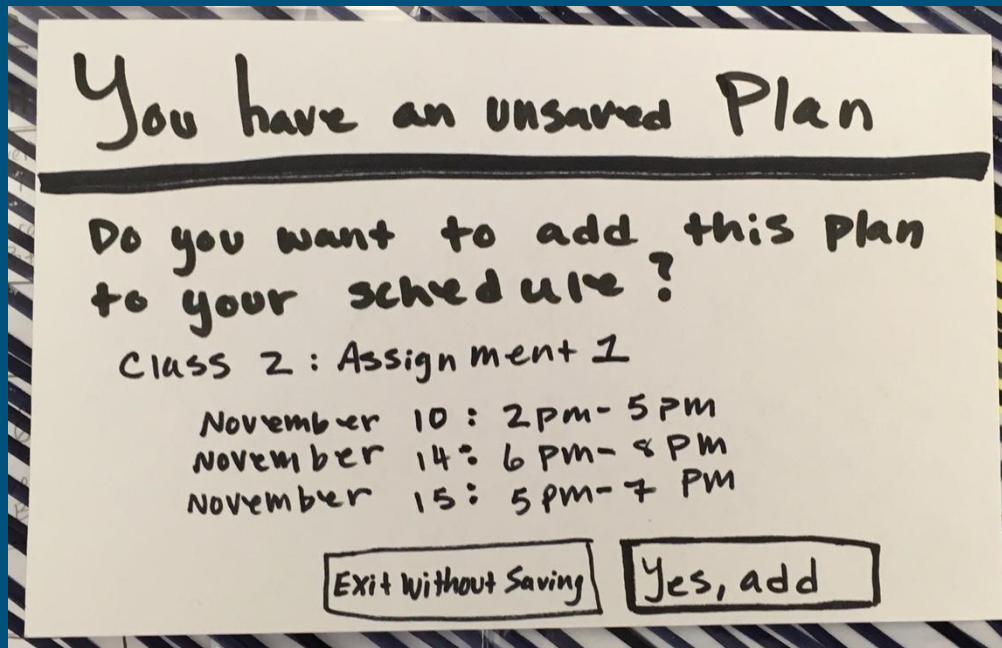
School login tailored to institution



# Major Changes

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Warning dialogs before losing changes



# Final Paper Prototype

**Calendar Sources**

- University of Utah
  - CLASS 1
    - HW 1 Plan
    - Quiz 1 Plan
    - Reading 1 Plan
  - CLASS 2
    - Assignment 2 Plan
    - Assignment 1 Plan

**ADD Source +**

**Due Date** **Plan** **Homework Time**

		1	2	3	4	5
6	7	8	9	Assignment 1 2-5 PM	11	12
13	14 Assignment 1 6-8 PM	15 Assignment 1 5-7 PM	16	17	18 Assignment 2 Due	19
20	21 Reading 1 4-6 PM	22	23 Reading 1 Due - HW 1 Due	24	25 Assignment 2 Due	26
27	28	29	30	31	32	33

# Final Paper Prototype

**Class 1**  
Reading 1

**Back** X

Statistics

This Assignment

Hours Spent	Average	7
Grade	Average	B+

Personal

Hours Spent	Average	6
Grade	Average	B+

Overall Course

Hours Spent	Average	5
Grade	Average	B-

Recommended Assignment Schedule

Percentage of grade   
Select a Priority  Low required  
November 18: 3pm - 6pm

Total time: 3 hours

# **Digital Preliminary Task:**

## Import Class Schedule from Calendars

# Digital Mockup

A digital mockup of a calendar application interface for November 2016. The interface features a yellow header bar at the top with a close button ('X') on the right. Below the header is a dark grey sidebar on the left labeled 'Calendar Sources' with a '+ Add New Source' button. The main area displays the month of November 2016 in a grid format. The days of the week are labeled at the top: SUN, MON, TUE, WED, THU, FRI, SAT. The dates for each day are as follows:

SUN	MON	TUE	WED	THU	FRI	SAT
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	1	2	3	4	5

The days of the week are labeled at the top: SUN, MON, TUE, WED, THU, FRI, SAT.

# Digital Mockup

The image shows a digital mockup of a calendar application interface for November 2016. The interface has a dark blue header with the title "Digital Mockup". Below the header is a yellow navigation bar with a red "X" button on the right. The main area is a calendar grid for November 2016, showing days from Sunday to Saturday. A large yellow modal window is overlaid on the calendar, covering the entire week from Monday to Friday. The modal contains four buttons: "Sync My University Calendar", "Sync a Google Calendar", "Other", and "Search". The "Sync My University Calendar" button is highlighted with a blue border. The "Sync a Google Calendar" button is also highlighted with a blue border. The "Other" and "Search" buttons are in a standard yellow box. The calendar grid shows the following dates: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 1, 2, 3, 4, 5.

Calendar Sources

Add Source

November 2016

SUN MON TUE WED THU FRI SAT

1 Sync My University Calendar

8 Sync a Google Calendar

15 Other

22 Search

29 30 1 2 3 4 5

# Digital Mockup

The digital mockup displays a calendar application interface. On the left, a sidebar titled "Calendar Sources" features a button labeled "Add Source". The main area shows a monthly calendar for November 2016, with days from Sunday to Saturday. A modal window is overlaid on the calendar, containing fields for "State" (set to "Utah") and "Institution" (set to "University Of Utah"), with a "Submit" button. Below this, there are two more buttons: "Sync My University Calendar" and "Sync a Google Calendar". At the bottom of the modal is a link labeled "Other". A search bar is also present at the bottom of the modal. The entire application has a clean, modern design with a yellow header and footer.

Calendar Sources

Add Source

◀ ▶ November 2016 Week Month Year

SUN MON TUE WED THU FRI SAT

1 6 7

8 13 14

15 20 21

22 27 28

29 4 5

X

Sync My University Calendar

State: Utah

Institution: University Of Utah

Submit

Sync a Google Calendar

Other

Search

# Digital Mockup

X

Calendar Sources

◀ ▶ November 2016 Week Month Year

SUN MON TUE WED THU FRI SAT

+ Add Source

 THE UNIVERSITY OF UTAH®

 UNIVERSITY OF UTAH HEALTH CARE X

7

14

21

28

5

## Login

uNID: (e.g. u8675309)

[Forgot your uNID?](#)

Password:

[Forgot your password?](#)

# Digital Mockup

X

Calendar Sources

+ Add New Source

University of Utah

Class 1

HW 1 Plan

Quiz 1 Plan

Reading 1 Plan

Class 2

Assignment 1 Plan

Assignment 2 Plan

◀ ▶ November 2016 Week Month Year

SUN	MON	TUE	WED	THU	FRI	SAT
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17 Assignment 1 Due	18	19	20	21
22 HW 1 Due Reading 1 Due	23	24 Assignment 2 Due	25	26	27	28
29	30	1	2	3	4	5

# **Digital Main Task:**

## Plan Out an Upcoming Assignment

# Digital Mockup

< X

## Class 2

### Assignment 1

#### Statistics

This Assignment

Hours Spent	Average 7
Grade	Average B+

Personal

Hours Spent	Average 6
Grade	Average B+

Course

Hours Spent	Average 5
Grade	Average B-

#### Recommended Assignment Schedule

Percentage of grade  %  
Select a priority

# Digital Mockup

## Class 2

### Assignment 1

#### Statistics

This Assignment

Hours Spent	Average 7
Grade	Average B+

Personal

Hours Spent	Average 6
Grade	Average B+

Course

Hours Spent	Average 5
Grade	Average B-

#### Recommended Assignment Schedule

Percentage of grade  %  
Select a priority  \* required

- Low
- Medium
- High

# Digital Mockup

## Class 2

### Assignment 1

<

#### Statistics

This Assignment

Hours Spent	Average 7
Grade	Average B+

Personal

Hours Spent	Average 6
Grade	Average B+

Course

Hours Spent	Average 5
Grade	Average B-

#### Recommended Assignment Schedule

Percentage of grade  %  
Select a priority  \* required

November 10: 2 pm - 5 pm [change](#)  
November 14: 6 pm - 8 pm [change](#)  
November 15: 5 pm - 7 pm [change](#)

Total time: 7 hours

[Accept Plan](#) [Cancel](#)

# Digital Mockup

The image shows a digital mockup of a software application interface. At the top, there is a dark blue header bar with the text "Digital Mockup". Below this, the main window has a dark background. In the center, there is a white modal dialog box. The dialog has a yellow header bar with the text "Class 2" on the left and a red close button "x" on the right. Below the header, the text "You have an unsaved plan." is displayed in bold. Underneath, a question asks, "Do you want to add this plan to your schedule?". Below this, the details for "Class 2: Assignment 1" are shown, including the dates and times: "November 10: 2pm - 5pm", "November 14: 6pm - 8pm", and "November 15: 5pm - 7pm". To the left of the modal, there are three rows of collapsed card-like structures, each with "Hours" and "Grade" fields. To the right of the modal, there is a sidebar titled "Assignment Schedule" containing a table with three rows, each with a "change" button. At the bottom right of the modal, there is a "Cancel" button.

Class 2

Unsaved Changes! x

You have an unsaved plan.

Do you want to add this plan to your schedule?

Class 2: Assignment 1

November 10: 2pm - 5pm  
November 14: 6pm - 8pm  
November 15: 5pm - 7pm

Hours  
Grade

Hours  
Grade

Hours  
Grade

Average B-

Assignment Schedule

Due	5 %	★ required
Priority	Medium	change
Priority	Medium	change
Priority	Medium	change

Cancel

# Digital Mockup

X

Calendar Sources

+ Add New Source

University of Utah

Class 1

HW 1 Plan

Quiz 1 Plan

Reading 1 Plan

Class 2

Assignment 1 Plan

Assignment 2 Plan

◀ ▶ November 2016 Week Month Year

SUN	MON	TUE	WED	THU	FRI	SAT
1	2	3	4	5	6	7
8	9	10 Assignment 1 Plan	11	12	13	14 Assignment 1 Plan
15 Assignment 1 Plan	16	17 Assignment 1 Due	18	19	20	21
22 HW 1 Due	23	24 Assignment 2 Due	25	26	27	28
29	30	1	2	3	4	5

# Digital Sub Task:

## Change a Plan

# Digital Mockup

< X

## Class 1

### Reading 1

#### Statistics

This Assignment

Hours Spent	Average 7
Grade	Average B+

Personal

Hours Spent	Average 6
Grade	Average B+

Course

Hours Spent	Average 5
Grade	Average B-

#### Recommended Assignment Schedule

Percentage of grade  %  
Select a priority  \* required

# Digital Mockup

< X

## Class 1

### Reading 1

#### Statistics

This Assignment

Hours Spent	Average 7
Grade	Average B+

Personal

Hours Spent	Average 6
Grade	Average B+

Course

Hours Spent	Average 5
Grade	Average B-

#### Recommended Assignment Schedule

Percentage of grade  %

Select a priority  \* required

- Low
- Medium
- High

# Digital Mockup

< X

## Class 1

### Reading 1

#### Statistics

This Assignment

Hours Spent	Average 7
Grade	Average B+

Personal

Hours Spent	Average 6
Grade	Average B+

Course

Hours Spent	Average 5
Grade	Average B-

#### Recommended Assignment Schedule

Percentage of grade  %  
Select a priority  \* required

November 21: 4 pm - 6 pm

Total time: 2 hours

# Digital Mockup

## Class 1

Reading 1

<

Change 'Reading 1' Plan

Assignment Schedule

Planned Days

Date: November 18th, 2016

From: 3:00pm

To: 6:00pm

+ Add Day

Hours Spent

Grade

Hours Spent

Grade

Hours Spent

Grade

B-

1 %

Low

\* required

6 pm

change

Cancel

Change

Cancel

# Digital Mockup

< X

## Class 1

### Reading 1

Stat This Assig...

Hours Spent

Grade

Planned Days

Date November 18th, 2016

From 3:00pm

To 6:00pm

-

Assignment Schedule

Due date grade 1 %

Priority Low \* required

6 pm Change

Cancel Change Cancel

Hours Spent

Grade

B-

Change 'Reading 1' Plan

Planned Days

Date November 18th, 2016

From 3:00pm

To 6:00pm

-

Assignment Schedule

Due date grade 1 %

Priority Low \* required

6 pm Change

Cancel Change Cancel

November 2016

Su	Mo	Tu	We	Th	Fr	Sa
30	31	1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	1	2	3
4	5	6	7	8	9	10

# Digital Mockup

## Class 1

Reading 1

Change 'Reading 1' Plan

Planned Days

Date: November 21st, 2016

+ Add Day

From: 3:00pm

To: 6:00pm

Assignment Schedule

Percent of grade: 1 %

Priority: Low

6 pm

Cancel Change

Cancel

Hours Spent

Grade

Hours Spent

Grade

Hours Spent

Grade

B-

# Digital Mockup

## Class 1

Reading 1

< X

### Statistics

This Assignment

Hours Spent	Average 7
Grade	Average B+

Personal

Hours Spent	Average 6
Grade	Average B+

Course

Hours Spent	Average 5
Grade	Average B-

### Recommended Assignment Schedule

Percentage of grade  %  
Select a priority  ★ required

November 18: 3 pm - 6 pm

Total time: 3 hours

# Digital Mockup

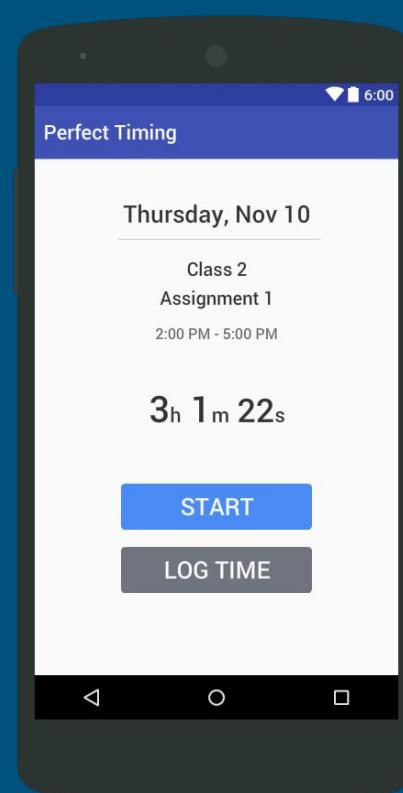
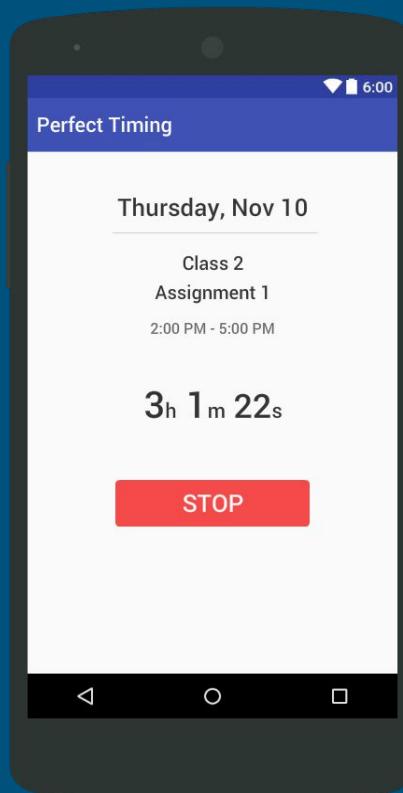
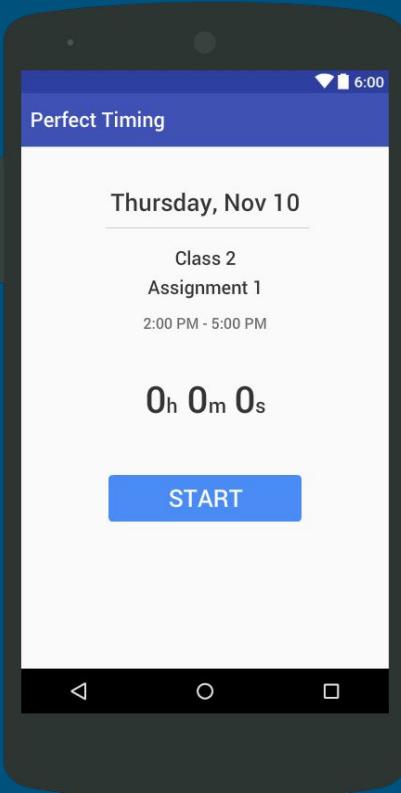
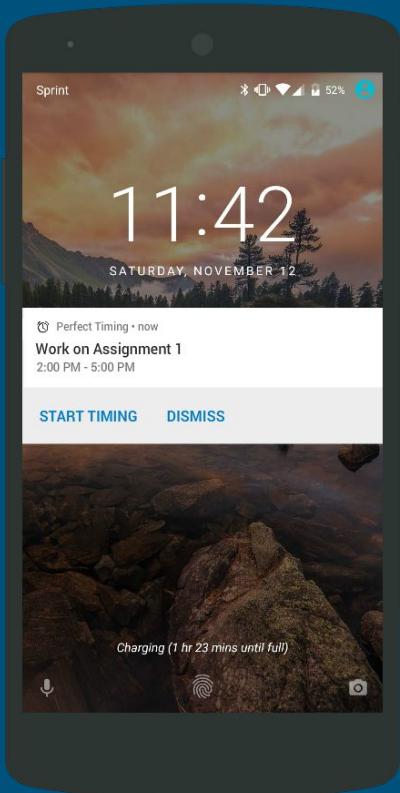
The digital mockup displays a calendar interface for November 2016. The left sidebar, titled "Calendar Sources", lists "University of Utah" (selected) and "Class 1" (with HW 1, Quiz 1, and Reading 1). It also shows "Class 2" with Assignment 1 and Assignment 2. The main area shows the month grid with days 1 through 30. Specific events are highlighted: "Assignment 1 Plan" on Nov 10, "Assignment 1 Due" on Nov 17, "HW 1 Due" on Nov 22, and "Reading 1 Due" on Nov 24. A red "X" button is in the top right corner.

November 2016							Week	Month	Year
SUN	MON	TUE	WED	THU	FRI	SAT			
1	2	3	4	5	6	7			
8	9	10 Assignment 1 Plan	11	12	13	14 Assignment 1 Plan			
15 Assignment 1 Plan	16	17 Assignment 1 Due	18	19	20	21 Reading 1 Plan			
22 HW 1 Due	23	24 Assignment 2 Due	25	26	27	28			
29	30	1	2	3	4	5			

# **Digital Additional Task:**

## Time Yourself with the Mobile App

# Digital Mockup



# Summary

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- Keep participants separated from design process
- Label clarity is not trivial
- Let participants report task completion
- Technologies have specific design patterns

# Thank You!

