

Professions App Project



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Step 1 Define the Problem



Parameters:

- Create 3 apps with user interfaces, one for computer, tablet, and mobile device (i.e. smart phones)
- Create an app for a life situation or profession
- Target at least 3 types of different people to use this app.

Questions:

- What are some things that can be incorporated into 3 apps to help people use technology in their professions or life situations?
- What platforms would this app best be designed for? Android or IOS?
- What should the target audience be for users to use this app?
- How simple or complex should this app be able to use and how effective will this app be to use?

Step 2 Brainstorm and Conduct Initial Research



Brainstorming:

Professions- Doctors, Lawyers, Teachers, Dentists, Accountants, Bus drivers, Assistants, Secretaries, Students, Research Analysts, Parents, Bank Teller, Judge, Store Owners

Ideas:

Doctors- patients, secretaries, assistants

Teachers- parents, students, tutors

Dentists- secretaries, patients, assistants

Bus Drivers- students, parents, dispatch

Store Managers- store associates, customers, inventory

Final Decision- Teacher, Students, Parents, Tutors

Purpose- To allow students do their homework on the computer, help parents be involved with students academics, be able to schedule a tutor for help, more teacher-parent interaction concerning students academics.

Step 2 Brainstorm and Conduct Initial Research cont'd



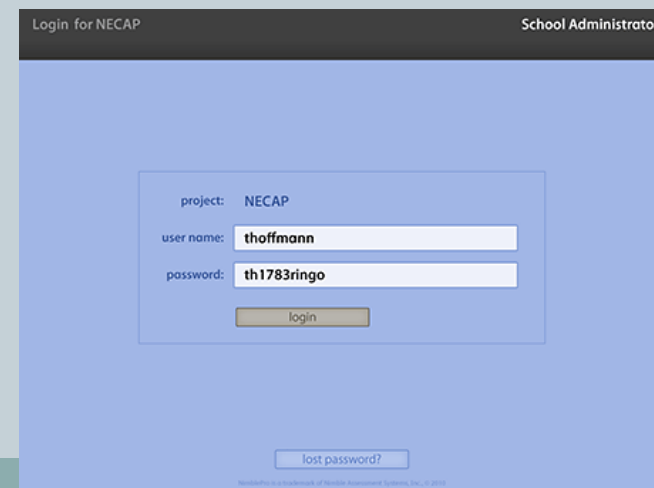
Apps already created for parents, teachers, and students-

- <http://www.scholastic.com/teachers/article/50-fab-apps-teachers> -article for apps that can be used by teachers
- <http://www.edudemic.com/wdwdt-a-new-app-that-keeps-teachers-students-parents-in-sync/> -article on WDWDT, app for teachers, students, and parents to be in sync
- School websites

Technology Affordances- touch screen, vibration, displays, camera, auto detection, gps, videos, voice recorder, sounds, lights, notifications

Step 2 Brainstorm and Conduct Initial Research cont'd

Visual Research-



Step 2 Brainstorm and Conduct Initial Research cont'd

Visual Research-



For Parents **NEXT**

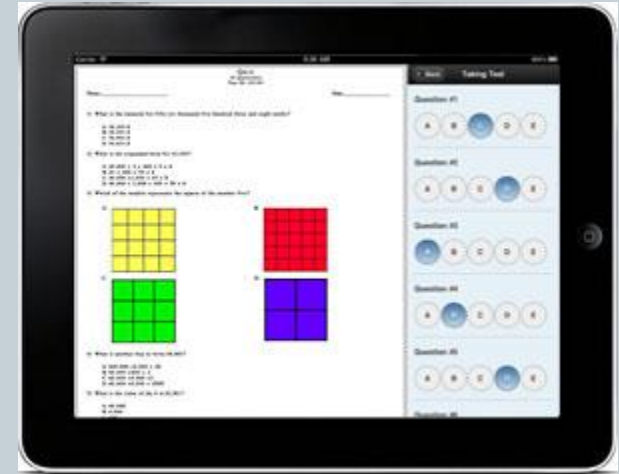
100% of Parents and Students will get messages via the app or email (and soon via txt msg).

- All class members ✓
- Students only
- Parents only
- June Bakker
1 contact
- Alex McKay
2 contacts
- Mark Leonard
m.leonard@gmail.com ✓

For Students **NEXT**

Students today live on their mobile devices and want short, important messages at their fingertips.

- From: Trevor Bales (2)**
What's the best day for the concert?
2013-01-23 2:58 PM
- Sent (3)**
2nd time.
2013-01-24 7:56 PM
- Sent (3)**
Let's go number 1.
2013-01-24 2:28 PM
- From: Trevor Bales (2)**
I'm glad.
2013-01-24 2:14 PM
- From: Trevor Bales (2)**
Let's meet.
2013-01-24 1:55 PM



Step 3 Choose Your Subject



For this project I will create interfaces for Teachers, Students, Parents and Tutors to be in reach of one another for the benefit of the Students academics.

Roles of the Platforms-

- Smartphone- it will be used for the parent to check notifications and get updates on how their students are doing on their school work and it will allow them to meet with the teacher and sign their son or daughter with a tutor. It will also be used for scheduling with the tutor and see their calendar.
- Tablet- this platform will help the teacher see the progress of their students and will be able to contact the students parents as well as check the grades of the students to see how they are keeping up with the assignments. It will also act as a way to upload homework for the students to work on.
- Desktop- this platform will aim mainly at the students as a place to complete their assignments, see their grades in subjects, email the professor or even video chat with the professors or tutors.

Step 4 Brainstorm and Test Concept



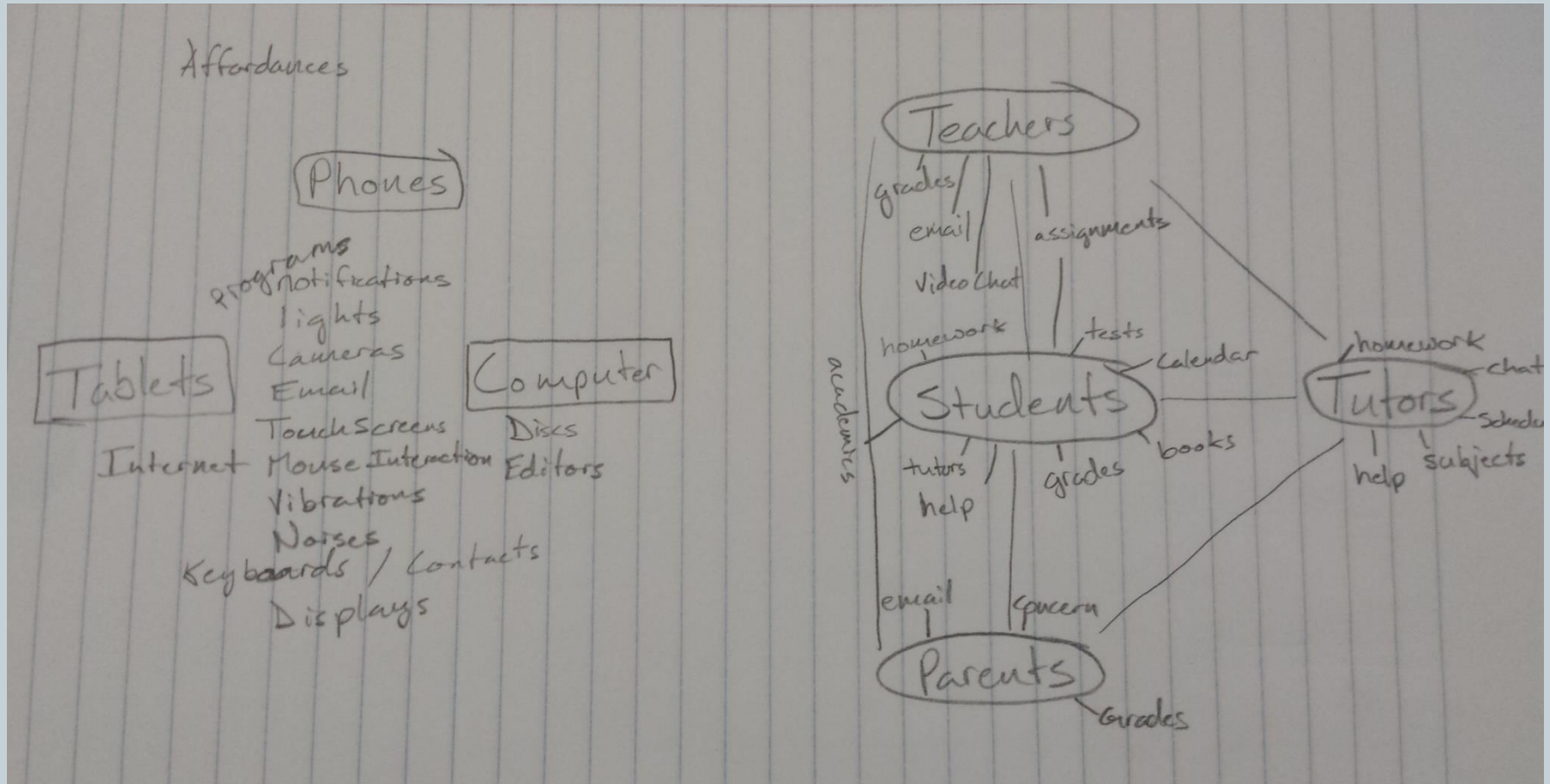
Target Audience- Students in Junior High, High School and College, Teachers/Professors of Junior High, High School and College, Tutors, and Parents of the students.

Things the app interface must do:

Login page, menus for each different person, schedule/calendar, assignments, grades, teachers list of students, list of subjects, tutors, email icon, video chat, submission of assignments, help icon, etc.

Step 4 Brainstorm and Test Concept cont'd

Explore Concepts-



Step 4 Brainstorm and Test Concept cont'd



Scenarios:

Teacher-Tablet

- a. Check the students grades to determine what parents need to be contact
- b. Email the parent of a student who is not doing good with their homework
- c. Add an assignment for students to complete for homework

Student-Computer

- a. Find homework that needs to be completed and submitted
- b. Schedule a tutor for help on your assignments
- c. Check your grades on previous assignments

Parent-Cell Phone

- a. Email the teacher about an assignment that doesn't make sense
- b. Schedule a time to meet with a tutor to help child bring up grade
- c. Check your child's grades

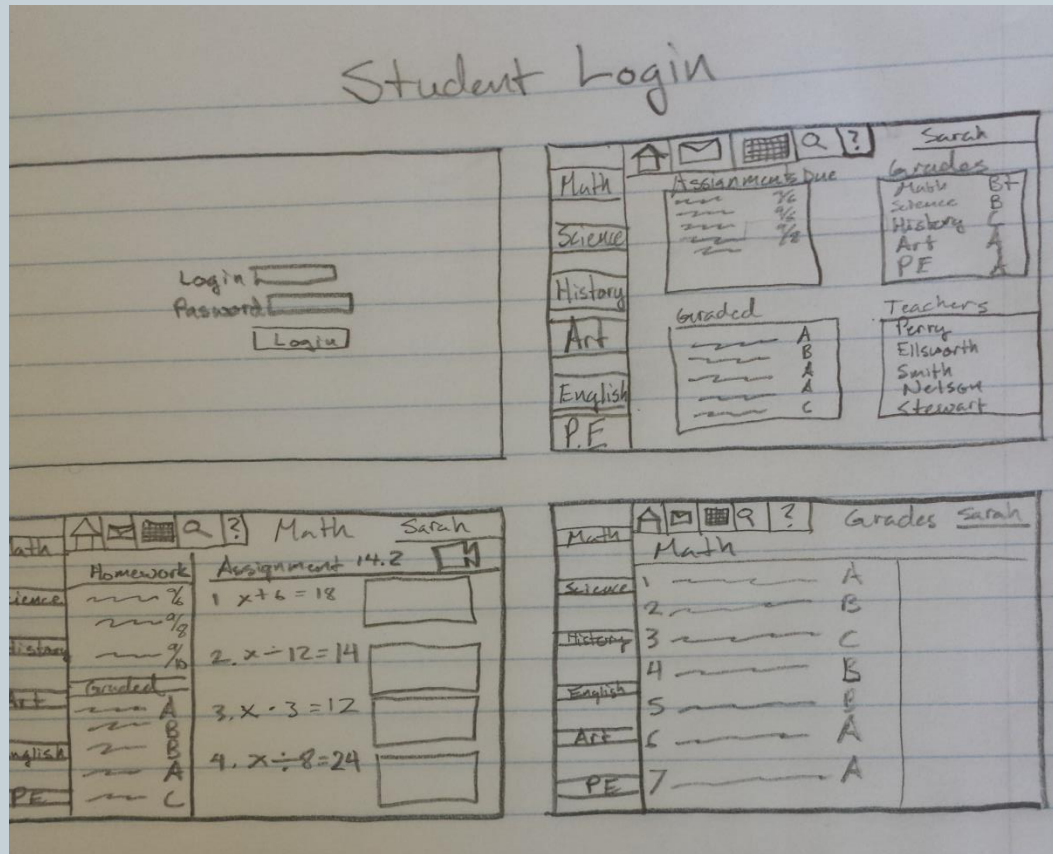
Tutor-Tablet

- a. Check your schedule for appointments
- b. Add an appointment to your calendar to help a student
- c. Video Chat with a student that needs your help

Step 4 Brainstorm and Test Concept cont'd



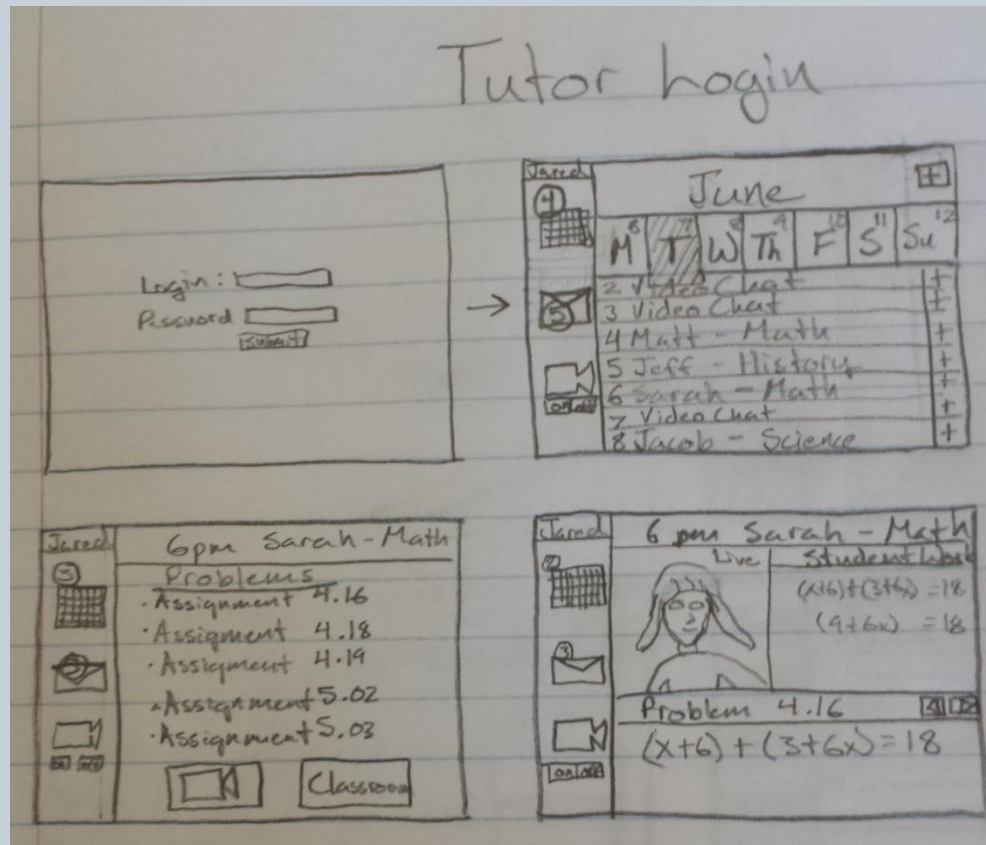
- Usability Testing Sketches



Step 4 Brainstorm and Test Concept cont'd



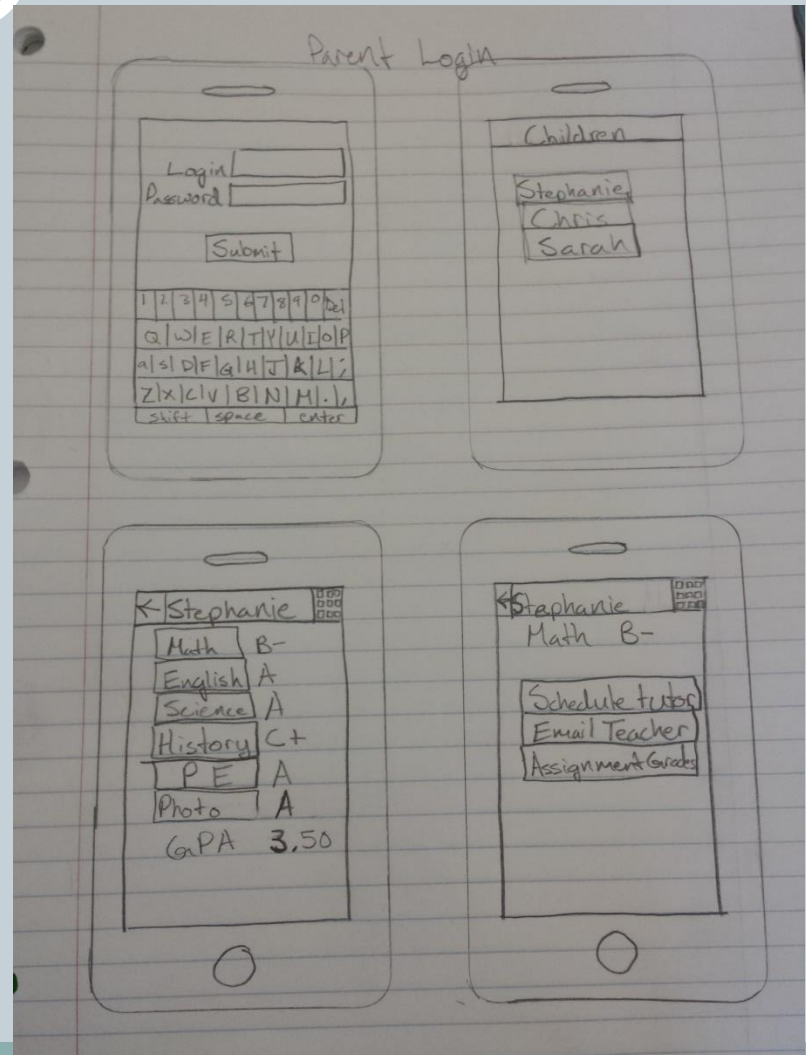
- Usability Testing Sketches



Step 4 Brainstorm and Test Concept cont'd



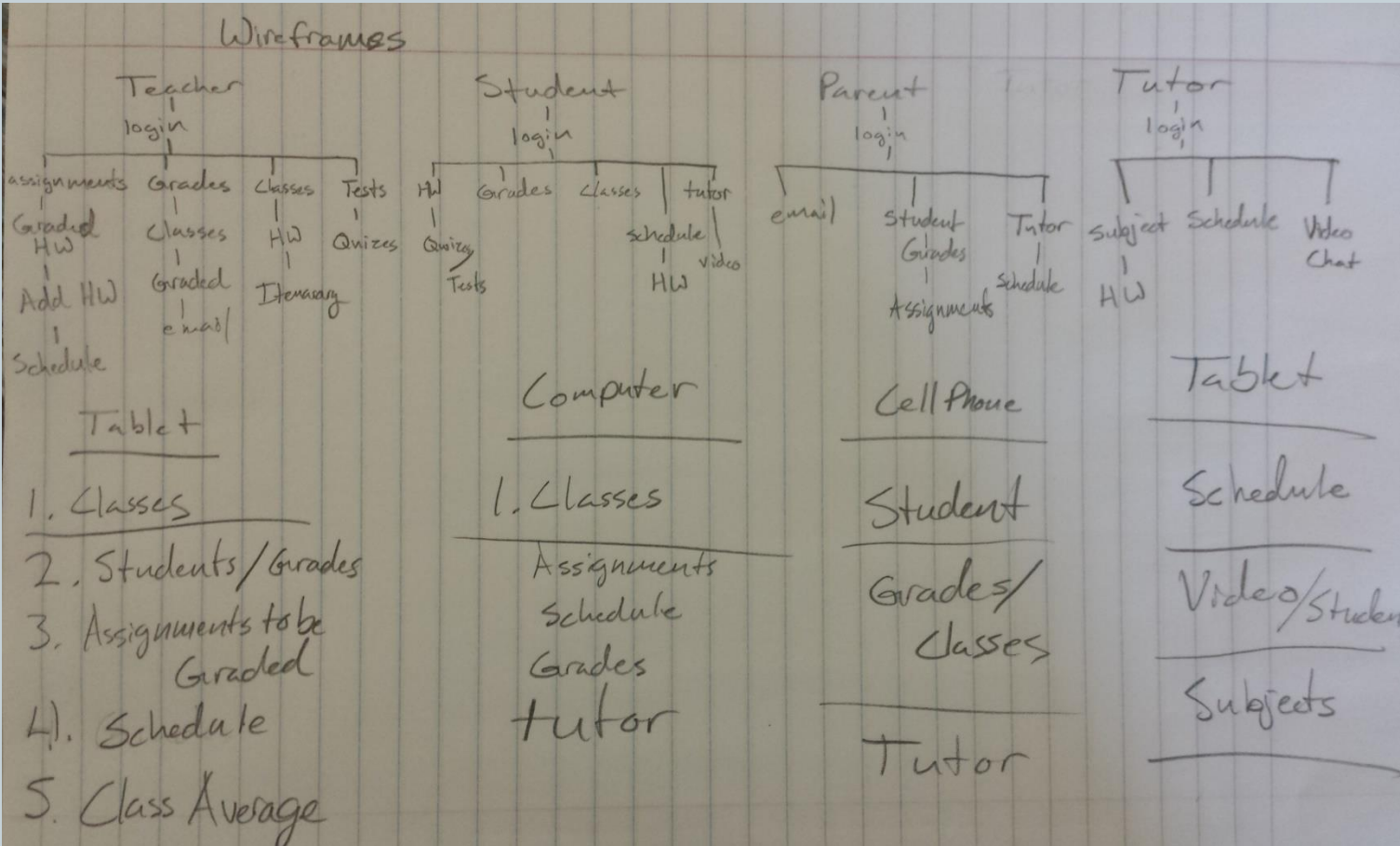
- Usability Testing Sketches



Step 5 Develop Interaction and Form



Wireframes-



Step 5 Develop Interaction and Form Cont'd



Scenarios Refined:

Teacher-Tablet

- a. Check the students grades to determine what parents need to be contacted
- b. Add an assignment for students to complete for homework
- c. Check the schedule for up coming lessons to give to your classes
- d. Check for emails from students and faculty

Student-Computer

- a. Find homework that needs to be completed and submitted
- b. Schedule a video chat with a tutor for help on your history assignments
- c. Email the professor/ teacher about a problem on you homework assignment

Parent-Cell Phone

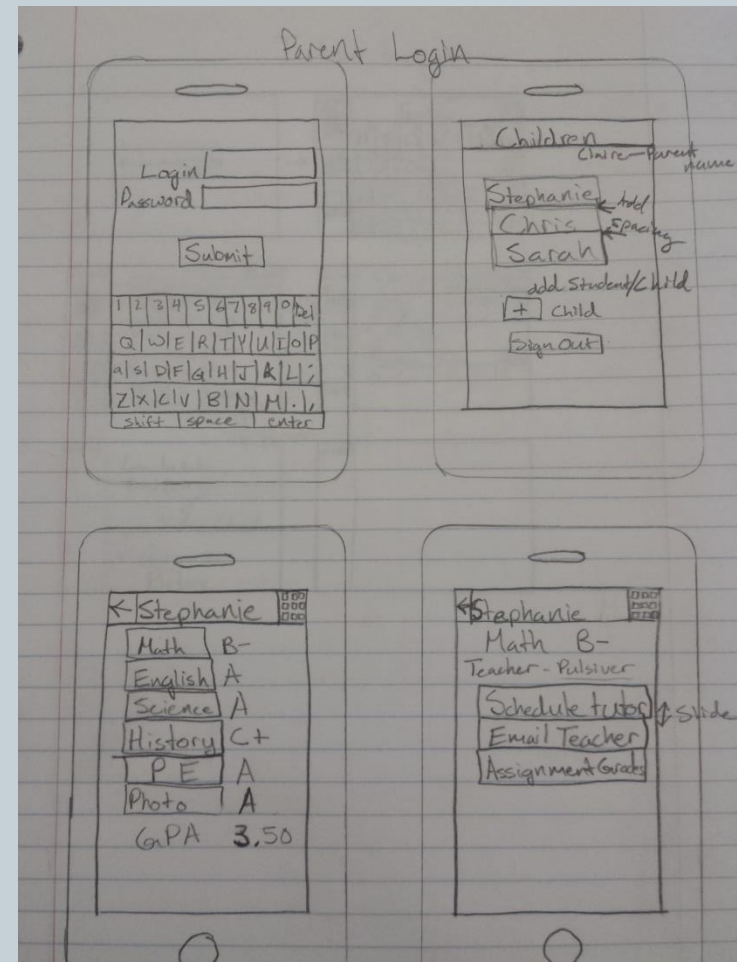
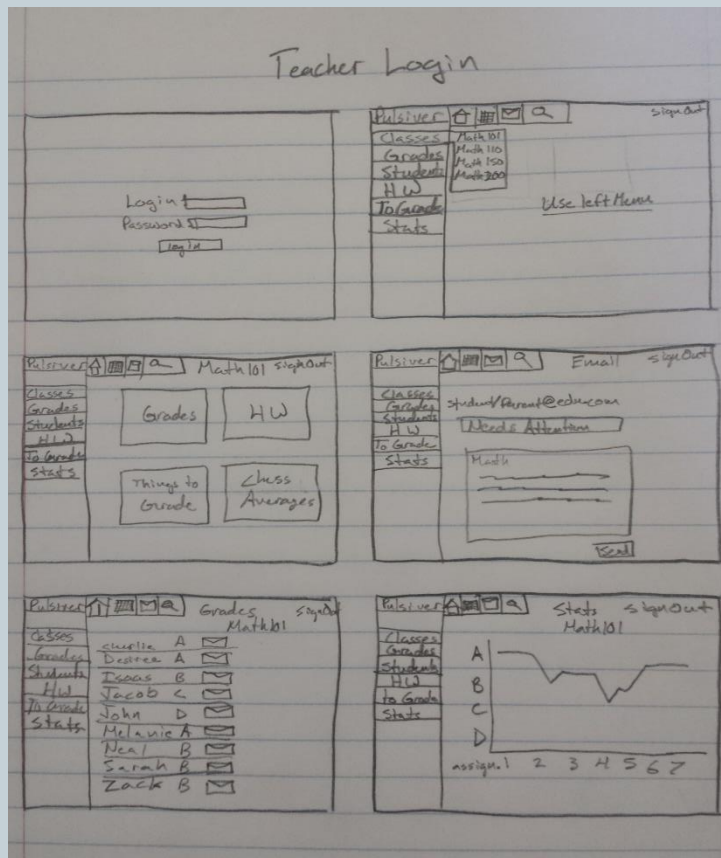
- a. Email the teacher to make an appointment to meet with them
- b. Schedule a time for your child to meet with a tutor to help them bring up their grade
- c. Check your child's grades

Tutor-Tablet

- a. Check your schedule for appointments
- b. Add an appointment to your calendar to help a student
- c. Video Chat with a student that needs your help

Step 5 Develop Interaction and Form Cont'd

Refined Paper Prototypes



Step 5 Develop Interaction and Form Cont'd



Tutor login

Hand-drawn wireframes for a Tutor login interface. The top section shows a login form with fields for 'Login:' and 'Password:' and a 'Login' button. To the right is a calendar for June with a list of events: 2 Video Chat, 4 Matt - Math, 5 Jeff - History, 6 Sarah - Math, 7 Video Chat, 8 Jacob - Science. Below this are two panels: 'Open Sarah - Math Problems' listing assignments 4.16, 4.18, 4.19, 5.02, and 5.03; and '6 pm Sarah - Math Live' showing a student label and a math problem $(x+6) + (3+6x) = 18$. A 'Tutor login' button is shown below. The bottom section is titled 'Available Buttons' and lists 'Video Chat' and 'Picture in Picture'.

Student Login

Hand-drawn wireframes for a Student Login interface. The top section shows a login form with 'Login:' and 'Password:' fields and a 'Login' button. To the right is a dashboard for 'Sarah' with sections for 'Assignments Due' (Math, Science, History, Art, P.E.), 'Grades' (Math, Science, History, Art, PE), and 'Teachers' (Perry, Ellisworth, Smith, Johnson, Stewart). Below this is a 'Math Sarah' section with 'Homework' and 'Graded' items, including equations like $1 \cdot x + 6 = 12$, $2 \cdot x - 12 = 14$, $3 \cdot x - 3 = 12$, and $4 \cdot x \div 8 = 24$. A 'fix Menu Buttons' note is written vertically. The bottom section is titled 'new design' and shows a 'Sarah Tutor' dashboard with 'Assignments' and 'Schedules' for 9/6, 9/8, and 9/10, each with a checkbox.

Step 5 Develop Interaction and Form Cont'd



Notes from User Testing-

Teacher- Put the classes on the left and have pop out menu on the right of the left menu next to the list of classes

Parent- Space the lists further apart, add sign-out button, make a button to add children to the list

Student- Eliminate the spacing on the left classes menu, Change some of the top icons, make email and tutor schedule easier, keep design simple, add sign-out button

Tutor- Add sign-out button, make video have available options, open tutor times, Video needs to have picture in picture, in-class or video tutoring options.

Step 6 Refine Interaction and Form



Branding and Style tiles:



Home



Calendar



Email



Search

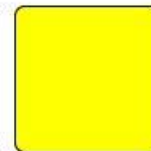


Tutor



Add Event

Colors Chosen



Submit

Button Style

Name

Input Text Field



Back Button



Video Chat

MYPORTAL

Logo

Step 6 Refine Interaction and Form Cont'd



Digital Prototypes: Parent (Platform-iphone)

MYPORTAL

Login

Password

Submit

Children

Stephanie

Jared

Sarah

John

Sign Out



Stephanie

Math A

English A

Science B-

History C+

Art A

Volleyball A

Sign Out



Stephanie
History

C+

Prof. Ashby

Assignments

Email Professor

Schedule Tutor

Sign Out

Step 6 Refine Interaction and Form Cont'd



Digital Prototypes: Parent (Platform-iphone)

◀ Stephanie History

Email Prof. Ashby

Subject

Send

◀ Stephanie History

Schedule a Tutor

November

5	6	7	8	9
12	13	14	15	16
19	20	21	22	23
26	27	28	29	30

◀ Stephanie History

Schedule a Tutor

November 6

2pm	James
3pm	Stephanie
4pm	Sarah
5pm	
6pm	Brian
7pm	Wesley
8pm	

Submit

Step 6 Refine Interaction and Form Cont'd



Digital Prototypes: Tutor (Platform- Ipad)

MYPORTAL

Login

Password

Michael John

November

M ⁵	T ⁶	W ⁷	Th ⁸	F ⁹
	2pm: James- History			<input type="button" value="🎥"/>
	3pm: Stephanie- History			
	4pm: Sarah- Math			<input type="button" value="🎥"/>
	5pm:			<input data-bbox="1796 1092 1850 1142" type="button" value="+"/>
	6pm: Brian- Science			
	7pm: Wesley- Math			<input type="button" value="🎥"/>

10
 6
 2

Step 6 Refine Interaction and Form Cont'd



Digital Prototypes: Tutor (Platform- Ipad)

Michael John
Sign Out

◀ 2pm: James- History



James: Can you help me find the answer to question 8?
Me: Sure, read page 68 and tell me what you think the answer is.
James: Thanks

Question 8: What started the US Civil War?

10
6
2

Michael John
Sign Out

Email

✉	James -I need your help...	△
✉	Cameron	△
✉	Sarah -I need your help...	△
✉	Help!!	△
✉	Homework	△
✉	Tests	△
✉	Jerry -I need your help...	△
✉	Greg	△
✉	Jane	△
✉	Homework -I need your help...	△

10
6
2

Step 6 Refine Interaction and Form Cont'd



Digital Prototypes: Teacher (Platform- Ipad)

MYPORTAL

Login

Password

Brian Pulsifer

Home

- Grades ▶
- Homework ▶
- Tests ▶
- Stats ▶
- Schedule ▶

Brian Pulsifer

Grades Math 101

- Grades ▶
- Homework ▶ **B+** **Allan**
- Tests ▶ **A-** **Allison**
- Stats ▶ **A** **Brianna**
- Schedule ▶ **C+** **Brick**
- A** **Bob**
- C-** **Cassidy**
- B** **Christian**
- B-** **Craig**
- A** **Diana**
- D+** **Drake**

Brian Pulsifer

Home

- Grades ▶ **Math 100**
- Homework ▶ **Math 101**
- Tests ▶ **Math 150**
- Stats ▶
- Schedule ▶

Step 6 Refine Interaction and Form Cont'd



Digital Prototypes: Teacher (Platform- Ipad)

Brian Pulsifer

Home

- Grades ▶
- Homework ▶
 - Math 100
- Tests ▶
 - Math 101
- Stats ▶
 - Math 150
- Schedule ▶

Sign Out

Brian Pulsifer

Homework Math 101

Grades ▶	Date	Assignment
Homework ▶	11/6	Assignment 14.2
Tests ▶	11/8	Assignment 14.3
Stats ▶	11/9	Assignment 14.5
Schedule ▶	11/12	Assignment 14.6
	11/14	Assignment 14.7
	11/16	Assignment 14.8
	11/19	Assignment 15.1
	11/21	Assignment 15.2
	+	
	+	

Sign Out

Brian Pulsifer

Homework Math 101

Date Due Assignment name

Assignment Details

Submit

Sign Out

Brian Pulsifer

Homework Math 101

Grades ▶	Date	Assignment
Homework ▶	11/6	Assignment 14.2
Tests ▶	11/8	Assignment 14.3
Stats ▶	11/9	Assignment 14.5
Schedule ▶	11/12	Assignment 14.6
	11/14	Assignment 14.7
	11/16	Assignment 14.8
	11/19	Assignment 15.1
	11/21	Assignment 15.2
	11/23	Assignment 15.3
	+	

Sign Out

Step 6 Refine Interaction and Form Cont'd



Digital Prototypes: Teacher (Platform- Ipad)

Brian Pulsifer

Home Grid Mail Search Homework Math 101

Grades ▶	Date	Assignment
Homework ▶	11/6	Assignment 14.2
Tests ▶	11/8	Assignment 14.3
Stats ▶	11/9	Assignment 14.5
Schedule ▶	11/12	Assignment 14.6
	11/14	Assignment 14.7
	11/16	Assignment 14.8
	11/19	Assignment 15.1
	11/21	Assignment 15.2
	11/23	Assignment 15.3

Sign Out +

Brian Pulsifer

Home Grid Mail Search Home

Grades ▶
Homework ▶
Tests ▶
Stats ▶
Schedule ▶

Sign Out

Brian Pulsifer

Home Grid Mail Search November +

Grades ▶	November
Homework ▶	M ⁵ T ⁶ W ⁷ Th ⁸ F ⁹
Tests ▶	
Stats ▶	
Schedule ▶	9-10: Math 101 Lesson 14.2
	10:15-11:15: Break
	11:30-12:30: Math 100 Lesson 12.3
	12:45-1:45: Math 150 lesson 13.5
	2-3: Tuesday Devotional
	3:15-5: Office Hours

Sign Out

Step 6 Refine Interaction and Form Cont'd



Digital Prototypes: Student (Platform- Computer)

MYPORTAL

Login

Password

Submit

Stephanie R.



Home

Grades ▶

Homework ▶

Tests ▶

Stats ▶

Schedule ▶

Sign Out

Stephanie R.



Home

Grades ▶

Homework ▶

Tests ▶

Stats ▶

Schedule ▶

Math

Science

English

History

Art

Volleyball

Sign Out

Step 6 Refine Interaction and Form Cont'd

Digital Prototypes: Student (Platform- Computer)

Stephanie R.

Grades
Homework
Tests
Stats
Schedule

Sign Out

Home Homework

Date Due	Assignment	Status
11/6	Assignment 14.2	Passed
11/8	Assignment 14.3	Passed
11/9	Assignment 14.5	Passed
11/12	Assignment 14.6	Incomplete
11/14	Assignment 14.7	Incomplete
11/16	Assignment 14.8	Incomplete
11/19	Assignment 15.1	Incomplete
11/21	Assignment 15.2	Incomplete
11/23	Assignment 15.3	Incomplete
11/24	Assignment 15.4	Incomplete

Stephanie R.

Grades
Homework
Tests
Stats
Schedule

Sign Out

Home Homework

11/12 Assignment 14.6

1. What is the speed of light compared to and how can it be measure?

2. What is the distance from Mars to the Sun compared to Earth and the Sun?

3. What is the fastest mammal in the world and how much faster is it than the next fastest mammal?

Submit

Stephanie R.

Grades
Homework
Tests
Stats
Schedule

Sign Out

Home Homework

Date Due	Assignment	Status
11/6	Assignment 14.2	Passed
11/8	Assignment 14.3	Passed
11/9	Assignment 14.5	Passed
11/12	Assignment 14.6	Complete
11/14	Assignment 14.7	Incomplete
11/16	Assignment 14.8	Incomplete
11/19	Assignment 15.1	Incomplete
11/21	Assignment 15.2	Incomplete
11/23	Assignment 15.3	Incomplete
11/24	Assignment 15.4	Incomplete

Step 6 Refine Interaction and Form Cont'd



Digital Prototypes: Student (Platform- Computer)

Stephanie R. Tutor

Grades
Homework
Tests
Stats
Schedule

November

M ⁵	T ⁶	W ⁷	Th ⁸	F ⁹
2pm: James- History				
3pm: Stephanie- History				
4pm: Sarah- Math				
5pm:				
6pm: Brian- Science				
7pm: Wesley- Math				

Sign Out + Spot is Available*

Stephanie R. Tutor

Grades
Homework
Tests
Stats
Schedule

November

M ⁵	T ⁶	W ⁷	Th ⁸	F ⁹
2pm: James- History				
3pm: Stephanie- History				
4pm: Sarah- Math				
5pm: Stephanie R.- History				
6pm: Brian- Science				
7pm: Wesley- Math				

Sign Out + Spot is Available*

Stephanie R. Tutor

Grades
Homework
Tests
Stats
Schedule

Subject Name

Assignments needing help

Video Chat Study Room

Submit

Sign Out

Stephanie R. Email

Grades
Homework
Tests
Stats
Schedule

Subject Email

Message

Submit

Submit and Return

Sign Out

Step 7 Presentation



Links to Prototypes in InVision.com:

Teacher: <http://invis.io/BE13EHK6R>

Tutor: <http://invis.io/Y313EGUAC>

Parent: <http://invis.io/XK13E8PA3>

Student: <http://invis.io/2713F2JJC> Images maybe oversized.

Step 7 Presentation Cont'd



Goals:

- Keep the design simple
- Have repetition in the designs between templates
- Use symbols instead of words
- User test the heck out of it
- Develop in the lines of the scenarios
- Use hidden menus to navigate
- Use limited fonts and colors in the design

User Test Changes:

- Menus were changed
- Backgrounds needed to have less color/ better contrast
- Button colors and shades changed
- Symbols and Branding had to be changed to accommodate desire action
- Sizes had to be different to accommodate between platforms
- Menus had to be simple
- Information to be displayed had to be changed
- Each platform had it's own difficulties one between another

Step 7 Presentation Cont'd



Conclusion:

In the duration that I have put this project together there were many factors that surprised me when designing and testing my interfaces over time. I found that this interface was the most simple out of all the projects that I have done in the past and the user testing was easy to explore and navigate and I realized how many conventions we have become used to with everything that we use on our smart devices.

For this project affordances and signifiers played big roles. This is because I decided to use limited amount of information to perform the tasks of the created scenarios. Some big challenges that I had were creating symbols that take shape of what the symbol button should do and where it should take you in the user interfaces. For most of this project I decided to stick close to the scenarios created in the beginning of this project and from the user testing I noticed that most everyone was able to accomplish the task either from the Home screen or from the last scenario ended.

The hidden menus were more idealistic rather than having a long list of items to choose from because it narrowed the searching down to small portions which the users enjoyed. The idea of having the same login interface between platforms was idea. I found that everyone uses a different login and through their own personal login they could access the item specified to them. Some allowed limited information such as the tutors and the parents while more information was able to be accessed through the student and teacher accounts.

I found that my app does help all the users perform the things that they want to see in an app that brings the students, teachers, parents, and tutors together for the benefit of the students good academics. I believe that if this were a real app that more people would use it for it's ability to be so versatile and likable between everyone that would use it.

Step 7 Presentation Cont'd

