

## Assignment 9 - Medium Fidelity Prototyping

# TutorNOW

### ***On-demand, student-to-student campus tutoring***

*Ryan Matsumoto, Josephine Chen, Asli Kimya, Louis Brion*

URL to Invision Prototype: <http://invis.io/B41M2UNN5>

**README:**

[https://docs.google.com/a/stanford.edu/document/d/18ft2BGyO92iyRG4sjqjbRau\\_LivLdgWcLga1TzDJMCY/edit?usp=sharing](https://docs.google.com/a/stanford.edu/document/d/18ft2BGyO92iyRG4sjqjbRau_LivLdgWcLga1TzDJMCY/edit?usp=sharing)

There's also a link to the prototype on Ryan's website:

<http://stanford.edu/~rmats414/home.html>

### **Problem and Solution Overview**

While college students currently use resources like office hours, Piazza, and dormitory resident tutors for homework help, these services can often be inadequate: office hours are crowded, resident tutors can be busy, and one-on-one tutoring can be expensive. There is a clear need for an on-demand tutoring service that is reliable, fast, and user-friendly. Because college campuses have thousands of students who take similar classes, our solution leverages mobile technology to connect these students for an on demand peer-to-peer tutoring application.

### **Tasks**

#### **Task #1: Finding Tutoring Immediately- Complex**

College students often need homework help at random hours of the day, so our first task is for students to find help immediately. Users of our application will ultimately be able to specify parameters for their tutoring request (class, location, etc) and be matched with an appropriate tutor in a timely manner.

**Changes to Task #1:** Although our previous assignments had finding a tutor/tutee immediately as a task, we realized that most of our initial users will be looking for homework help rather than offering homework help. Thus, we chose to focus on the process from the tutee's perspective, assuming tutors already exist in the application database. We also decided to eliminate the first task (creating a profile), because it is not really necessary for first-time customers, and the length of profile setup can discourage them.

#### **Task #2: Be able to identify quality tutors- Medium**

Our second task is to provide students a way to identify the best tutors in their area. Our application will allow students to view a comprehensive profile of a tutor including ratings, reviews, and endorsements before committing her time and money to the tutor.

**Changes to Task #2:** Our previous assignment called this task a reviewing system. We generalized our task to its new name so that it applies to what customers would do more generally without our application.

#### **Task #3: Fast and Painless Payment System- Simple**

Our third task is for students to pay their tutors in an easy, intuitive, convenient manner. Our application makes the process automatic, so that after session payments are of little worry to both tutors and tutees.

**Changes to Task #3:** This was not a specific task in previous assignments, but we determined that showcasing our fast and easy payment system as a task would be important in attracting customers.

## Revised Interface Design

- **Simplified payments system-** Almost all of our application testers from last week were confused by the karma point system. After further consultation with our studio leader, we decided to simplify our payments system to a cash-based solution that allows users to connect their Venmo accounts to the application. Now, students will pay tutors with money through their Venmo accounts after a tutoring session ends. This design change makes the payment process more straightforward and less confusing to students who are in a rush. (See Figure #1)

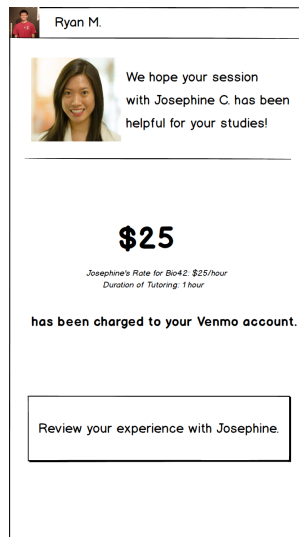


Figure #1: Easier Payments System

- **No initial profile required anymore-** One of our application testers noted that setting up her profile took a very long time. We decided to no longer make it mandatory to set up a tutor/tutee joint profile before requesting help. This will allow first-time customers to more easily access our application without getting frustrated by a lengthy sign up process. However, tutors will still need to set up profiles, and our new prototype now has much better profiles for tutors. (See Figure #2)

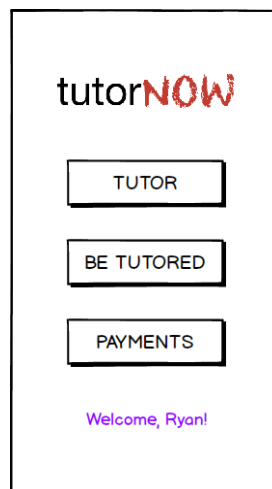


Figure #2: Get tutoring help immediately; no need to create a profile as a tutee!

- Simplified tutee-decided location-** Two our application testers were confused about who decided the location where the tutoring took place. In our new design, we make it clear that tutees are the ones who choose the location, and tutors cannot “negotiate” these locations. Thus, students are matched with tutors more efficiently where the student wants to meet. (See Figure #3)

Figure #3: Tutee sets location + Location Description

- Improved tutor profiles-** One of our application testers wanted to view more information about a tutor beyond the tutor’s average rating, so we expanded tutor profiles for our medium-fidelity prototype. Now, students can view tutor profiles as they scroll through tutoring offers. Tutor profiles now include background information, classes the tutor can help with, skills + endorsements, past reviews, and average rating. Tutor profiles help students accomplish task #2: Identifying high quality tutors. (See Figure #4)

Figure #4: Improved tutor profile

- **Location Description-** Our user testing showed us that location based tutoring can often be confusing if an *exact* location is not specified. Our new feature allows tutees to both mark a location on the map and add any additional location description information as text. For example, a tutee might specify that he wants to meet his tutor in 420-040, or Old Union 219. (See Figure #3 above)
- **Reviews and ratings for the tutor, not the tutee-** We observed from our user testing that it wasn't really necessary for tutors to rate their tutees. This just takes up our customers' valuable time and is not really important to accomplishing our major tasks.

**Scenario #1:** Tutees request tutors through our on demand tutoring system

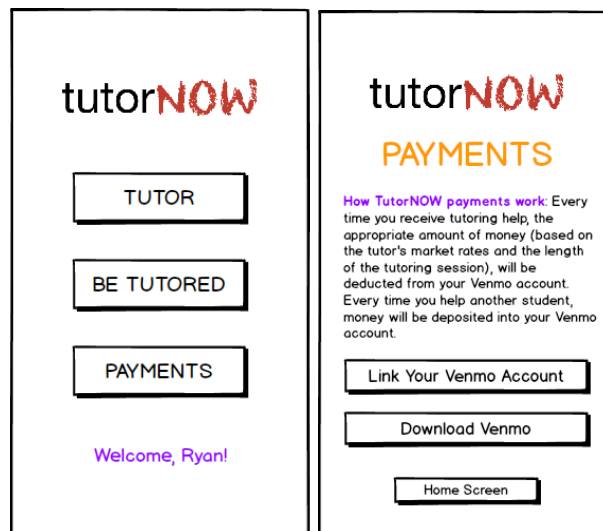
**Scenario #2:** High quality tutors are identified through comprehensive tutor profiles that appear when a tutee views tutoring offers. Tutees continue to improve tutor reliability by reviewing, rating, and endorsing tutors at the end of each session.

**Scenario #3:** Customers link their TutorNOW accounts with their Venmo accounts for fast, automatic, painless payments at the end of each session.

#### STORYBOARDS:

Red arrows denote taps that move you to the next screen

Blue arrows represent Text Input (For example, a tutee inputting 'BIO 42')

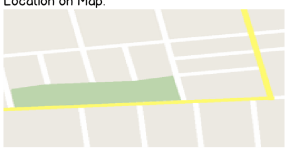


Ryan M.

I need help with:

When?:  
 Now  
 Between  and

Assignment Description:

Location on Map:  


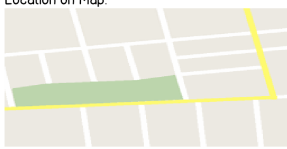
Location Description:

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I need help with:

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 Now  
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Assignment Description:

Location on Map:  


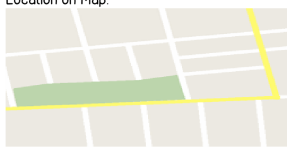
Location Description:

Ryan M.

I need help with:

When?:  
 Now  
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Assignment Description:

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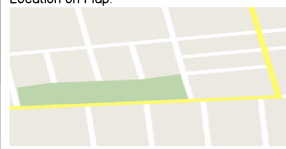
Location Description:

Ryan M.

I need help with:

When?:  
 Now  
 Between  and

Assignment Description:  
Comparing innate and acquired immunity.

Location on Map:  


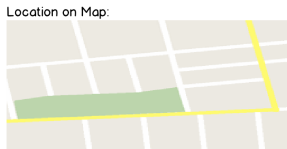
Location Description:

Ryan M.

I need help with:

When?:  
 Now  
 Between  and





Assignment Description:  
Comparing innate and acquired immunity.

Location on Map:  



Location Description:  
Room 420-040

Ryan M.

Tutoring Offers for Bio 42:

	<input type="button" value="View Profile"/>	<input type="button" value="Accept Offer"/>
	Rate: \$30/hr	★★★★★
	<input type="button" value="View Profile"/>	<input type="button" value="Accept Offer"/>
	Rate: \$20/hr	★★
	<input type="button" value="View Profile"/>	<input type="button" value="Accept Offer"/>
	Rate: \$25/hr	★★★★★
	<input type="button" value="View Profile"/>	<input type="button" value="Accept Offer"/>
	Rate: \$55/hr	★★★★★

### Tutor Profile: Josephine C



School: Stanford  
Year: Class of 2015  
Major: Biology  
Minor: CS

**Classes She Can Tutor:** CS 106A, CS 106B, CS 103, CS 109, BIO 41, BIO 42, BIO 43, PSYC 135, PSYCH 1

**Skills and Endorsements**

- Social Media
- C
- Fluby on Italia
- Java
- C++

**Market Rates for Josephine**

CS Classes: \$30/hour  
BIO Classes: \$25/hour  
PSYCH Classes: \$24/hour

**Recent Reviews**

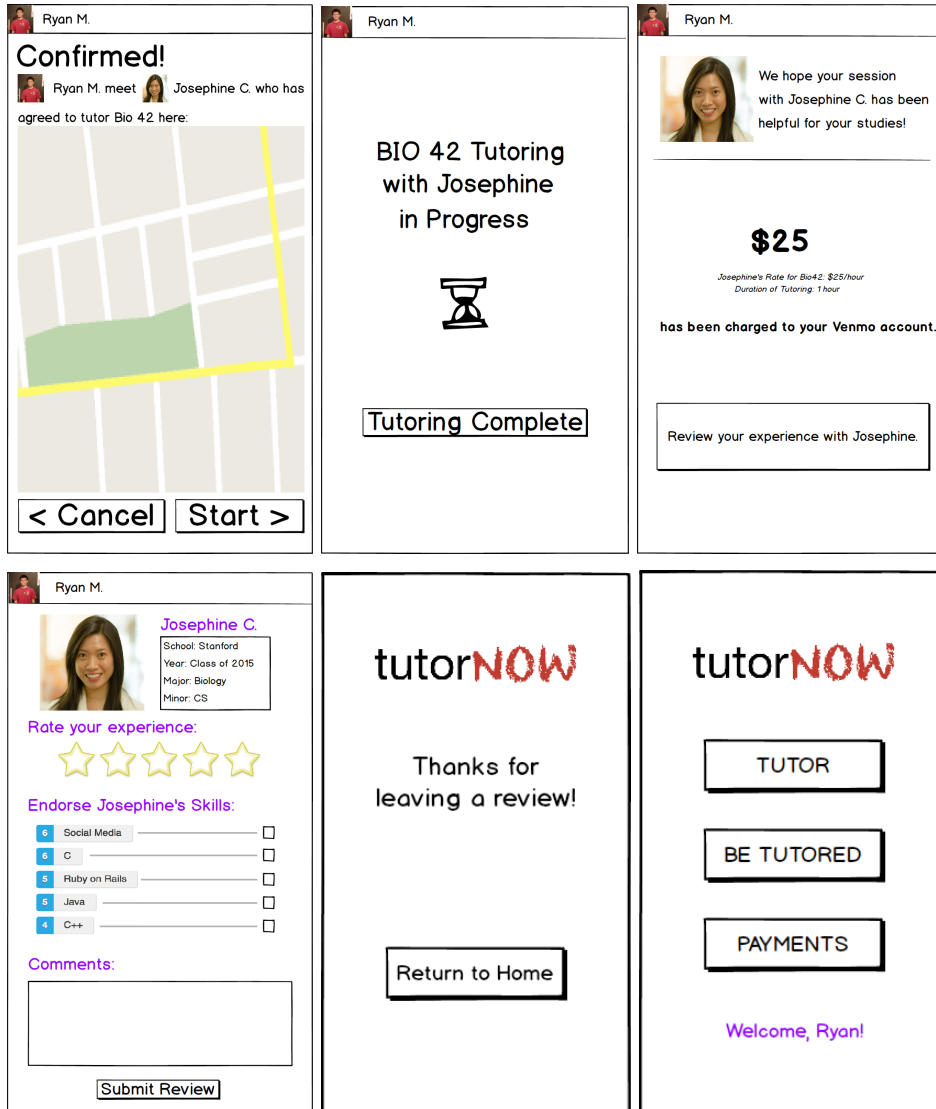
"Very knowledgeable about biology. She really helped me do well in BIO 42!"

"Josephine is great at explaining complex things in simple terms."

"Wonderful tutor! Very friendly and personable."

**Average Rating:**

★★★★★



## Prototype Overview

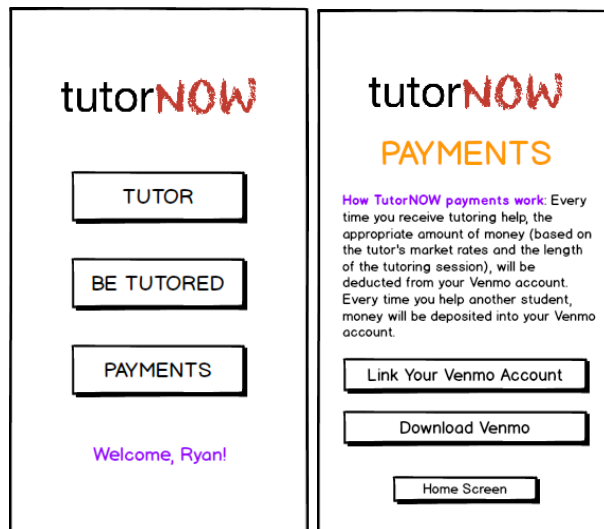
- Tools-** We created our screen mockups using Balsamiq and linked them together for the final prototype using Invision. Balsamiq was valuable because it had pre-designed common features like buttons, text fields, and drop down menus. It also had a very helpful tool for centering objects and keeping them in line with each other. Invision was helpful because it allowed us to easily link up all of our different screens for a unified application flow. Balsamiq's main weakness is that its features tend to be static and created for design purposes rather than usability. Invision's weakness is that it did not allow us to provide much interactivity through our prototype. While our final application will dynamically generate "tutor offers" in a feed for the tutee, our prototype hard codes this in.
- Limitations/Tradeoffs-** Our prototype leaves out the entire flow for tutors responding to tutoring requests. Although allowing students to be tutors is important, we decided that it was more important to showcase the design flow from the tutee's perspective, since most of our initial customers will be students seeking homework help. While a complete application would

demonstrate how a tutor signs up and creates a tutoring profile, our current prototype shows tutor profiles after they're created, from the tutee's perspective.

Our current prototype also has usability limitations for the post-tutoring review process. Although our screens show how a tutee would "rate" her tutor using the star system, write a short review in the comments box, and "endorse" her tutor for certain skills, the prototype does not have interactivity for these features. This is due to the natural limitations of medium-fidelity prototyping tools and their inability to allow users to input text and select a star rating.

- **Wizard of Oz Techniques/Hard Coded Features-** Most of the functions in our prototype that require a user to input text or select their preferences use the "Wizard of Oz" technique. For example, the prototype displays the button for linking one's account to Venmo, which is not interactive, since that would require us to use the Venmo API, which is beyond the scope of this prototype. Additionally, tutees cannot actually move the map around in our prototype to select a tutoring location. This is also due to the limitations of Invision/Balsamiq: having an interactive, movable map would require actual coding. Tutees similarly cannot actually select the class they need help with: a class is "hard-coded" as an example. A tutee's "tutoring offers" do not appear dynamically as they will in the final version: they are hard-coded into our prototype. We hard-coded a lot of information so that we could focus on the design and visuals of our application rather than implementing complex backend functionality. Ultimately, we chose to showcase a specific tutee's experience to show potential customers the main functionality of our application while glossing over technical details.

## Prototype Screenshots

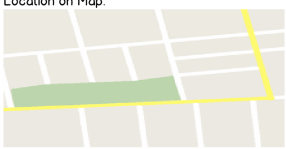


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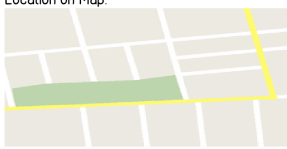
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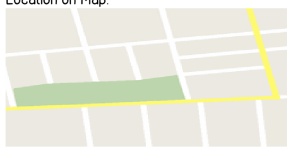
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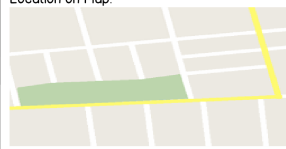
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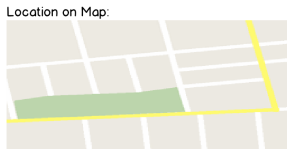
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"Josephine is great at explaining complex things in simple terms."

"Wonderful tutor! Very friendly and personable."

**Average Rating:**


★★★★★



Ryan M.

### Confirmed!


Ryan M. meet Josephine C. who has agreed to tutor Bio 42 here:



< Cancel Start >


Ryan M.

## BIO 42 Tutoring with Josephine in Progress



Tutoring Complete

Ryan M.



We hope your session with Josephine C. has been helpful for your studies!

---


# \$25

Josephine's Rate for Bio42: \$25/hour  
Duration of Tutoring: 1 hour

has been charged to your Venmo account.


Review your experience with Josephine.

Ryan M.



**Josephine C.**  
School: Stanford  
Year: Class of 2015  
Major: Biology  
Minor: CS

Rate your experience:



Endorse Josephine's Skills:

- 6 Social Media
- 6 C
- 5 Ruby on Rails
- 5 Java
- 4 C++

Comments:

Submit Review

# tutorNOW

Thanks for leaving a review!

Return to Home