Idea:

Academic Resource Market.

Brief description:

//Copy & pasted from skype discussion//

[9:58:35 PM] Justin Li: **I was thinking of an academic resource market**

[9:58:48 PM] Justin Li: **where students can buy and sell textbooks, lecture notes, recordings etc**

[9:59:17 PM] Justin Li: **helps students find the resources they need since the textbook stores are basically robbery**

[9:59:24 PM] Justin Li: **and missing lectures is a common occurrence**

[9:59:46 PM] Justin Li: **i was thinking we could implement cross price checking so it could check the prices compared to amazon etc**

[9:59:47 PM] Justin Li: **app**

[10:01:50 PM] Flora Lee: **I like the idea with the addition of lecture notes and recordings, since those could be helpful.**

CSC 301 idea: St.george Campus task posting app

Problem targeting:

Anyone who needs St.george Campus student's help:

Sometimes you got a really busy week for midterm and assignments so you can't make it to some class and you just need the notes from someone (willing to pay or other rewards).

Someone who wants to buy last semester's midterm or assignment.

You are a tourist coming to St. George that needs short guild through St. George campus and you are willing to pay a little for local students.

Planning an event on campus and need fast help from students.

Or you are some commuter just hanging around campus for a class 5hours later so you want to make some money out of this time, or just an enthusiastic person wanting to help with small favors.

For the above problem there is no single platform that can do all of those, there might be Facebook groups for some but students just misses it sometimes and don't have a detail planner/ formal posting for the tasks. What we offer is a unified platform targeted for campus students that want and are willing to make some bucks during the campus time.

Details:

- A platform for all students to post / accept tasks
- **Posters**:
  - Specifies tasks in detail:
    - Dates, location, rewards, duration, number of people's need, which program the task is related to, etc.
    - Can be other student, clubs, or anyone needing UofT Student's help
- **Receiver**:
  - let the receivers fill out information when registering:
    - Program studying – easier to recommend / notify new tasks for user
    - Which days are free to work – app won't recommend days not free
    - Detail info can let the app have a recommend page for the user.
    - App could notify receivers if the receiver is close to the location of the task.

Idea:
E-bulletin Board for events on campus.
Problem it solves:
1. With UofT clubs, we use Facebook event a lot for announcement and registration. However, there's never been a way to search for all kinds of events on campus. Thus, sometimes, students never know some awesome things are happening because no one introduced them.
2. Very often, we need to key in basic info like names, student #, emails over and over for different events.
Objectives:
- A platform where students can search for events and activities.
- Clubs to promote their events, doing registrations.
- Cut down registration time for attendee.

Structure:
- Club
  - Administrator
  - Introduction
- Event
  - Club
  - Host (students)
  - Venue
  - Time
  - Tags (for searching and category)
- Students
  - Name
  - Student #
  - Emails and other basic info

Home page can show the "hottest" events by view count and registration count in different categories for students to check out (in that day or week). Search bar on top of it.
Students will be able to see all events they registered.
Administrators and hosts, who are essentially students, will have the right to post in/ make changes to club and event.

CSC301 Project Idea:
Events & Places Recommendations in Toronto

Users and Aims of this Idea:

- Want a mobile app that can show the recommendations for the best restaurants/places/stores that can be found in the Toronto region.

  - ✓ This app would be great for tourists or new visitors to Toronto
  - ✓ Good for even residents or frequent visitors to the city, who always want to know a recommendation for a new or different restaurant of the week, or recommendations for recent rising popular clothing store, etc
  - ✓ App would provide the user with accessing the information they would want all in one application, where instead of going through a step process of switching between browser and the Google Maps application

Categories:

- Food & Café's
- Fashion & Apparel
- "Towns" (Chinatown, Koreatown, etc)
- Hairsalons & Beauty
- Music & Albums
- More to come…

Concept:

Based on the latest best reviews & feedbacks, this app will give a list of results to the top rated places or events to the category the user chooses. For example, if the user chooses "Foods & Café > Family Restaurants", the app will list entries of restaurants; where with each entry will feature the name of the restaurant, and a brief description of what type of food the restaurant sells (e.g. Indian Cuisine, Chinese Style buffet). When a user decides to click on an entry, a small map will be shown giving the address and location of the restaurant (following Google Maps as an example). Underneath the map will show the general directions the user can take to get to the place of interest – nearest TTC station or transit route, etc. Finally below the general directions interface the screen will either show a brief menu/items the restaurant/location features, OR the entry will feature customer reviews.

Other Notations, Implementation Details:

- Extracting data from the web, or using an Android API to do so in order to gather the wanted information of recommendations & feedbacks
- Depending on time constraints may need to include only a few categories of recommendations

- This would feature a part of the navigation idea we originally had for the UofT Campus Map Route idea, though for this idea this won't be the main focus of the app

<u>Our Idea:</u> This idea revolves around having "mathematical trees" which will be used to incrementally teach students different disciplines of math.

- Create a website that uses a hierarchical method of organization for math principles to facilitate learning/teaching of various subjects in math.
- Due to time restraints, we may have to restrict this to just teaching one specific area of math such as quadratics.

This website will provide two interfaces:

1. **For teachers** – Teachers have the ability to create "classes"; allows teachers to add students in their class to a special "group" within the website that is visible only to a select number of users.
    - Teachers may choose which of the "branches" of math topics are related to their course and pursue those branches. The "branches" the teacher chooses to "pursue" will be highlighted (and may optionally have a deadline set) for every students in the class.

1. **For students** – Every student is provided with a "math tree". This math tree starts from the most basic principles and builds its way to more complex ones (addition -> substraction -> multiplication -> factoring -> quadratics ->etc.).
    - Once a student joins a "class", they will have highlighted topics on their tree as selected by their teachers.
    - Students have the ability to create study groups (maybe ... if time) in which they can discuss how to approach problems and help others.

<u>The way the math tree works.</u>

The math tree begins with the most basic principles, and then works its way to more complex ideas based off of the previous branch. For example, the first branches can be addition and subtraction. From addition we can learn multiplication, from subtraction we can learn division. From here, we can learn factoring, from factoring, we can learn quadratics and so on.

- Every node in the math tree consists of problem sets with varying levels of difficulty. As math often requires variables and follows mostly strict methods, it is very easy to make a large set of unique problems.
- Every node in the math tree also consists of an interactive set of instructions on how to approach a particular problem.
- Additionally students can practice the problems as much as they would like without repeating the exact same question multiple times until they feel comfortable with a specific type of problem.
- The level of difficulty in a particular branch can be changed.
- Since math requires using many smaller principles to solve larger and more complex problems, it can be a lot easier for a computer to identify where a student struggles and suggest topic to go back to and practice.

<u>Rationale:</u>

The TDSB and many other school boards provide many different ways of teaching math. Additionally, they also have many different levels at which they teach math to students of a

particular age. While there is great flexibility in the teaching methods available by schools, once a student chooses a school and is part of a class, there is often a very linear, rigid structure by which students are taught math. This is often subject to the discretion of the teacher a particular group of students have. While some methods may be effective for one group of students, they may not be entirely effective for others. Additionally, students in the same class may have varying backgrounds in the subject making it difficult for those who may not be as familiar with mathematical concepts as other students. Our proposition for teaching math provides a very flexible way of teaching math that allows each student to focus on areas that they feel are particularly troubling for them while still being aware of the curriculum and set of problems that they must be able to answer for class. Yada yada, I'm bored, don't wanna write but I think you get the gist of it.