Main Project Ideas and Entrepreneurship

CS 370 SE Practicum, Cengiz Günay

(Some slides courtesy of Eugene Agichtein and the Internets)

Greatest inventor: Prof. Brain Nerve
Agenda

Warm-up project:

- Results of initial grading
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Main project:
- Ideas presented today
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Upcoming guest student startups on Thursday 2/27:

1. *LikePlum* – Marketplace for expert advice
2. *CampusBubble* – Campus events and activities
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Today:
- Ideas: yours and mine
- Introduction to entrepreneurship
Main Project Ideas
Guidelines/criteria

- Doable in the rest of the semester
- Worth your while – a learning experience
- Other value: possible future endeavor

Your ideas:
- Only two of them so far
- Can propose them, but no guarantees
- Better if you can convince a team to take it by next Tuesday

My ideas:
- Back-end ready projects from CS 570 Data Mining course from last semester
- Already-started project from CS 485/540 Software Engineering
- Other campus projects

CS 370, Günay (Emory)
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Data mining project: MARTA bus predictor

What’s done:

- MARTA provides real-time bus location info
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- Possible summer funding (pending)
  - Data Science for Social Good Atlanta
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- iPad Annotation and Markup App for Pathology Images
- CS 485/540 Software Engineering course project
- Co-supervised by Dr. Fusheng Wang from Emory’s Center for Comprehensive Informatics (CCI)
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Current status:
- Some design work done
- Demo app working

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- Markup functionality
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Other client requirements:

- SQL for paper and reviewer info
- Admins set up deadlines, send reminder, etc.
- Papers submitted by users, acknowledge by email
- Match reviewers to papers; admin makes final decision
- Must be: reliable, secure, and fast.

No previous work done:

1. paper submission
2. reviewer registration
3. paper-reviewer matching
4. correspondence
5. admin

(do as many as you can)
FacultyApp: Job-ad bookmarking and progress tracking for academic positions
Anonymous nicknames, real applications
My project since Fall 2012
Intended for use by postdocs and other advanced professionals globally
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Need to add new section:
- Community/social component
- Users get points like in stackoverflow
- User profile pages
- Jobs applied
- Posts made
Other Possibilities from Data Mining

News filtering:

- For example, find news articles on soccer
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2. Baseball pitch prediction
   - Back-end halfway done to predict pitch type
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3. Twitter location
   - Can show on map where tweets are made
   - No clear idea of how to turn this into something useful
Got Ideas?
Your Ideas So Far

1. James Ding:
   "ecommerce site for food. It will use a clean interface (JQuery) and be backed in rails."

2. Jennifer Ashiru:
   mobile or web mini games in an 8 bit art style reminiscent of Space Invaders or old arcade style games.

3. Isaac Cohen
   Top Secret (talk to him)
   This idea of mine is a medically related phone app to log your own pain as it occurs in real time as an aid to diagnosing patients.

4. Any others?

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Advice from some real entrepreneurs

My sister, Eda, and her friend, Melodi:

Creators of startups in Turkey:
- Uplifers.com – Personal well-being news site
- Mihera.com – Sell your own creations (Like Etsy)
Why entrepreneurship?

As computer scientist you have options:

1. Work for some company
2. Work as freelancer
3. Work for yourself (entrepreneur)
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What is it mean to be an entrepreneur?

- persistent, passionate
- want to make a change
- not just idea, lots of sweat, too
Intellectual Property: Urban Legends?

Ideas are not that important, there are lots of them.

More importantly:

- Can you implement them?
- With real people?
- With real results?
- Can make profit?
- Can you convince people now that you can do this?

Bottomline:

- Don’t be afraid to share your ideas.
- Develop your ideas further by getting feedback.
- Network with the right people (business, law, marketing).
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- Don’t think of profit first
- First find a need in the market
- Think of other companies who did this: Google, Facebook, LinkedIn
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analyze market
- how many people?
- what’s the potential?
- who are competitors?
- sometimes you need to create your own market

Do some research!
Design your product

product ideas:

1. something new
2. integrate an existing product from another domain or country
3. make something existing better, cheaper
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users:
- create user base
- know your users
- keep statistics of user categories
Going forward

- make a plan, convince others this is profitable
- find incubator, accelerator, or private venture
- later ask for big money if you can promise big returns
Next class: Emory undergrad startups

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And maybe your project1 presentations. Will be in touch.