

Motivation

Description

We aim to build an application that allows employers to find suitable candidates with much less hassle. When employers have an opening that they need to fill, they will be able to use employ.me as their means of easily finding candidates who have the desired qualifications for the open position. Candidates will create profiles that accurately represent their professional skills, personality, and other qualifications. Employers will search for candidates based on the criteria of the job and type of person they need for the job; matching profiles will be connected in that way.

Purpose

1. Help employers find qualified applicants for their company
 - Employers want candidates who can do the job well. To aid in finding these candidates, candidates will create profiles that accurately portray their strengths, as well as credibilities to these strengths, if there are any (portfolio, classes taken, previous employment, etc). Employers can then search for candidates based on the job's criteria to find suitable matches
2. Create an introduction (Help employers find compatible candidates)
 - Employers might also be looking for candidates that fit in well with the culture of the company. All employers want qualified candidates, but it's also very important to find candidates whose personalities blend well with the personality of the prospective company. Usually, this is sometimes discovered during interviews, but to make this easier, we'd like to have a way to give candidates a chance to display themselves less formally, and more personally.

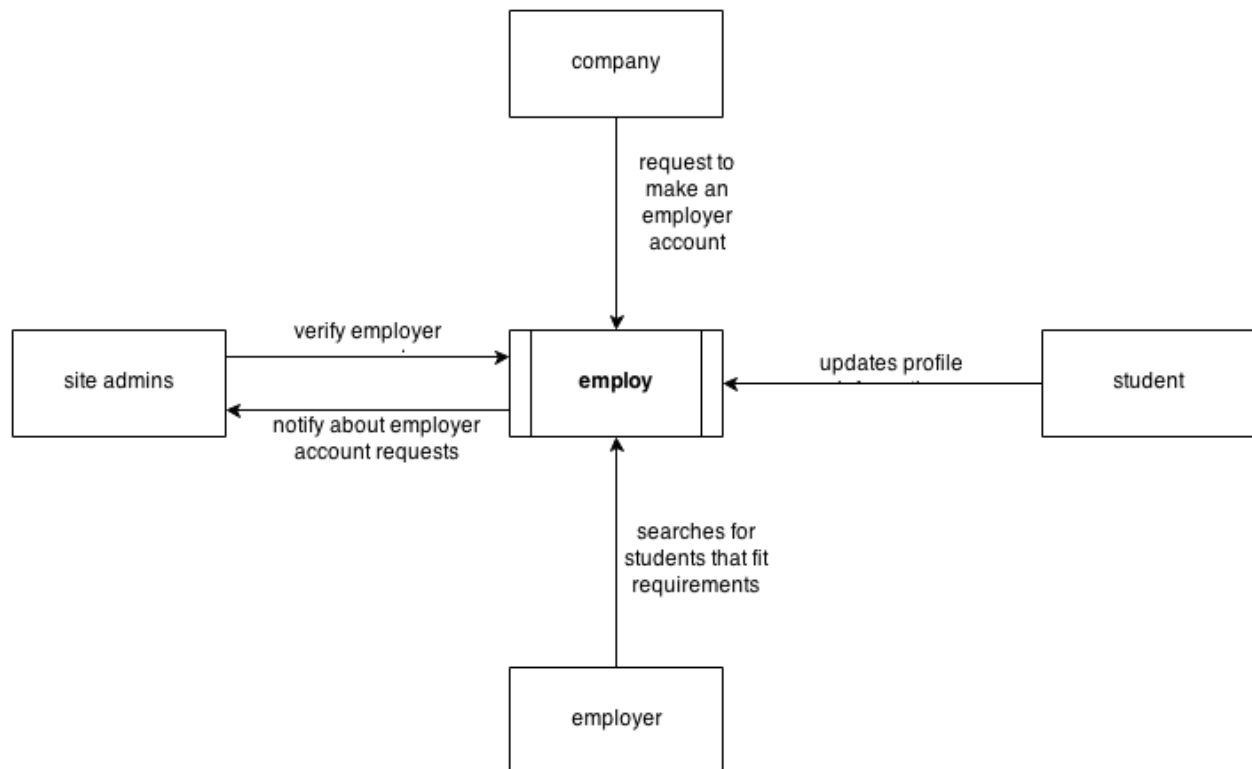
Existing Solutions

- Career Bridge
 - Deficiencies:
 - Interactions between candidates and employers are mainly placed under control of the candidate
 - Candidates may apply to a job opening thinking they have the right qualifications, but they may not be to the extent that they employer was looking for. Potential waste of time for both parties.
- Career Fair
 - Deficiencies:
 - Interactions between candidates and employers are mainly placed under control of the candidate
 - Candidates may visit a booth just because the company sounds cool, or because they want to see if they have a shot at a job with a company, without knowing much prior knowledge about the company beforehand.

This could potentially waste time for the both the employer, and the candidate.

- Candidates may not visit booths that they are good candidates for, either because they decided to leave the career fair, or they didn't know too much about the company and it didn't sound interesting, or whatever other reasons a candidate may have.
- Course Admin Emails
 - Deficiencies:
 - Students filter emails because most of the employer related emails don't directly apply to them and it becomes a nuisance to sift through them all the time. Also, an employer must wait for responses from students. Therefore, they are probably missing out on students that would be a good match for their company and position they are looking to fill.
 - Employers can't send job information directly to students that they think fit their requirements.

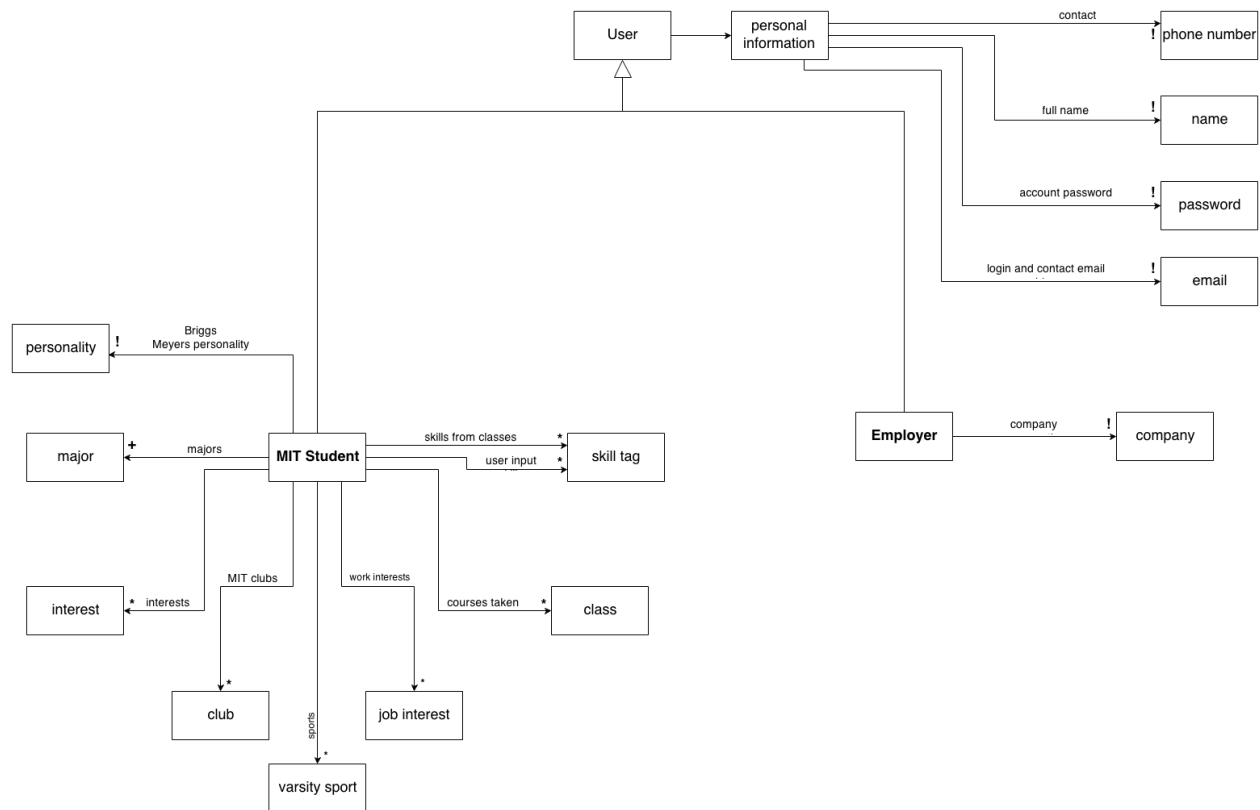
Context Diagram



Concepts

- Questionnaire
 - A set of questions asked to the user that helps build their profile. The responses to the questions asked will help employers find compatible candidates for an open position.
 - Motivated by purposes 1 & 2
- Tags
 - Each tag represents a skill that a candidate has. Tags can gain credibility through relevant classes taken. In this way, classes can relate to specific tags that the user has, so that the employer knows why the candidate has this tag, and how much the candidate was able to develop their proficiency with that tag.
 - Motivated by purpose 1
- Translate Function
 - A way of determining a tag based on a class (or experience?). The user can input a class, and the translate function will determine an appropriate tag (or tags) associated with this class.
 - Motivated by purpose 1

Data Model



- If a User is a Student, then their email must be an @mit.edu email

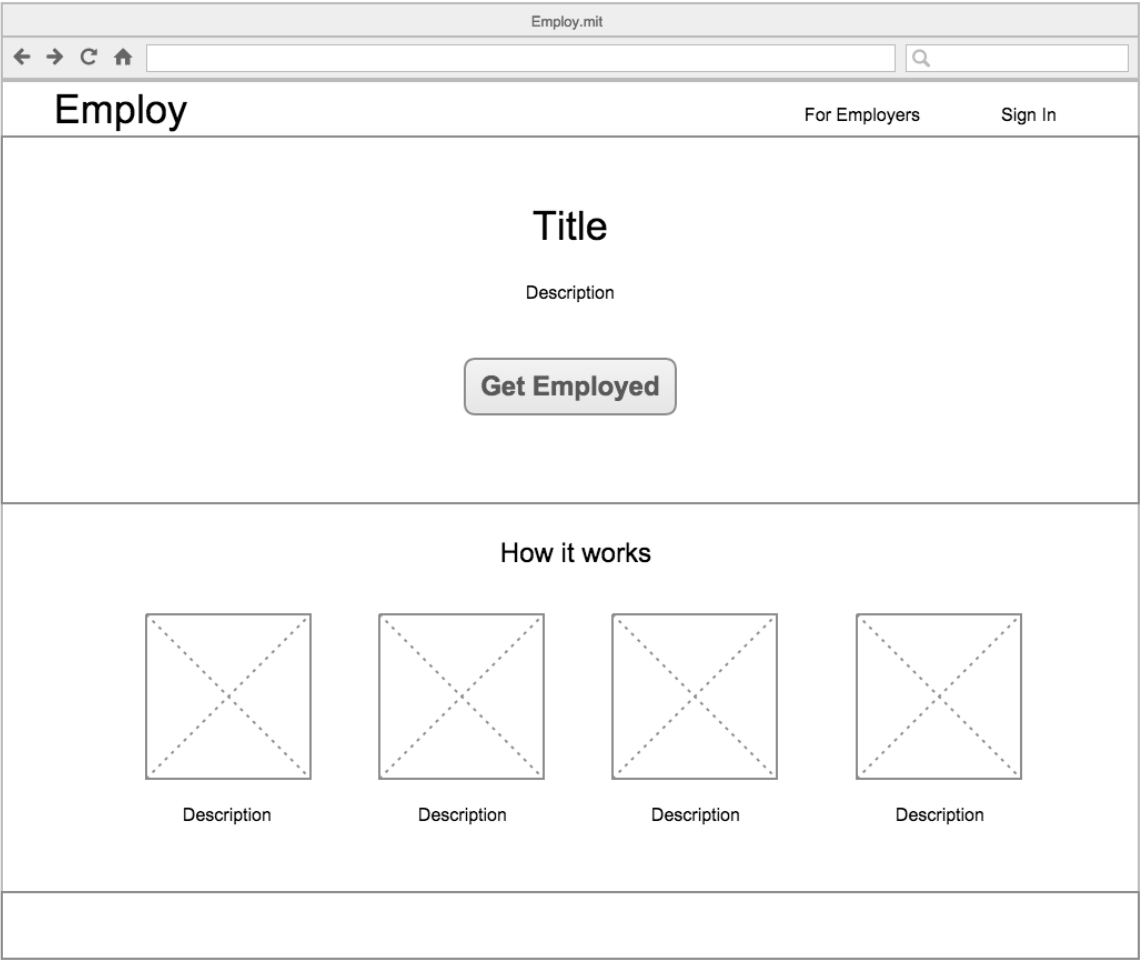
Security Concerns

- **Requirements:**
 - Only employers can view student information: In order to view a profile associated with a candidate, you must be logged in to the site under an employer account
 - Prevent bogus companies from being created: Companies must be approved by the site admin, who is someone entrusted to approve only legitimate companies.
- **Standard attacks:**
 - XSS: Escape all relevant user inputs, just to be safe. Minimize amount of user input that we allow
 - CSRF: Generate a secret CSRF token for each user session, and send as a hidden field with all forms. Be sure not to show token in URL.
- **Threat model:** What the adversary can do:

- If adversary can impersonate a company by acquiring an employer account, they can fool candidates into giving them more personal information
- If adversary can view candidate profile, they might be able to send a message to the candidate (again impersonating an employer/recruiter), asking for personal information.
- Adversary can script an attack on the site in an input field if not escaped properly

User Interface

Landing



Sign In

Employ.mit

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Employ

For Employers

Sign In

Sign In

email:

password:

Sign In

Student Registration

Employ.mit

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Employ

For Employers

Sign In

Student Registration

name:

email:

password:

password:

Create Profile

Employer Registration

Employ.mit

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Employ

For Employers

Sign In

Employer Registration

company:

name:

email:

phone:

password:

password:

Register

Student Profile Creation

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Employ

For Employers

Sign In

Question

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response area

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3/10

Student Profile View

Employ.mit

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Employ

Sign Out

Ben Bitdiddle

edit profile

Massachusetts Institute of Technology

Year: 2016

Personality: INTP

contact information

Skills

Java

Software Design

Web Development

Node.js

Job Interests

Software Engineer

Product Development

Activities

Dance Troupe

Varsity Water Polo

Hobbies and Interests

Hiking

Skiing

Student Profile Edit

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Employ

Sign Out

Personal Information

Classes

Skills

Job Interests

Activities

Hobbies and Interests

Save

View Profile

Classes

6.170 Software Studio

remove

6.004 Computation Structues

remove

add

Employer Search

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Employ

Sign Out

Year

Personality

Skills

Job Interests

Activities

Hobbies & Interests

Skills

Software Design

Javascript

HTML

CSS

Required

Software Design

Highly Desirable

Javascript

Bonus

Employer Search Results

Employ.mit

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Employ

Sign Out

Search Results

refine search

Ben Bitdiddle

Massachusetts Institute of Technology

Year: 2016

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Phone: 1-000-000-0000

Alyssa P. Hacker

Massachusetts Institute of Technology

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Phone: 1-000-000-0000

Ben Bitdiddle

Massachusetts Institute of Technology

Personality: INTP

Skills

Java

Software Design

Web Development

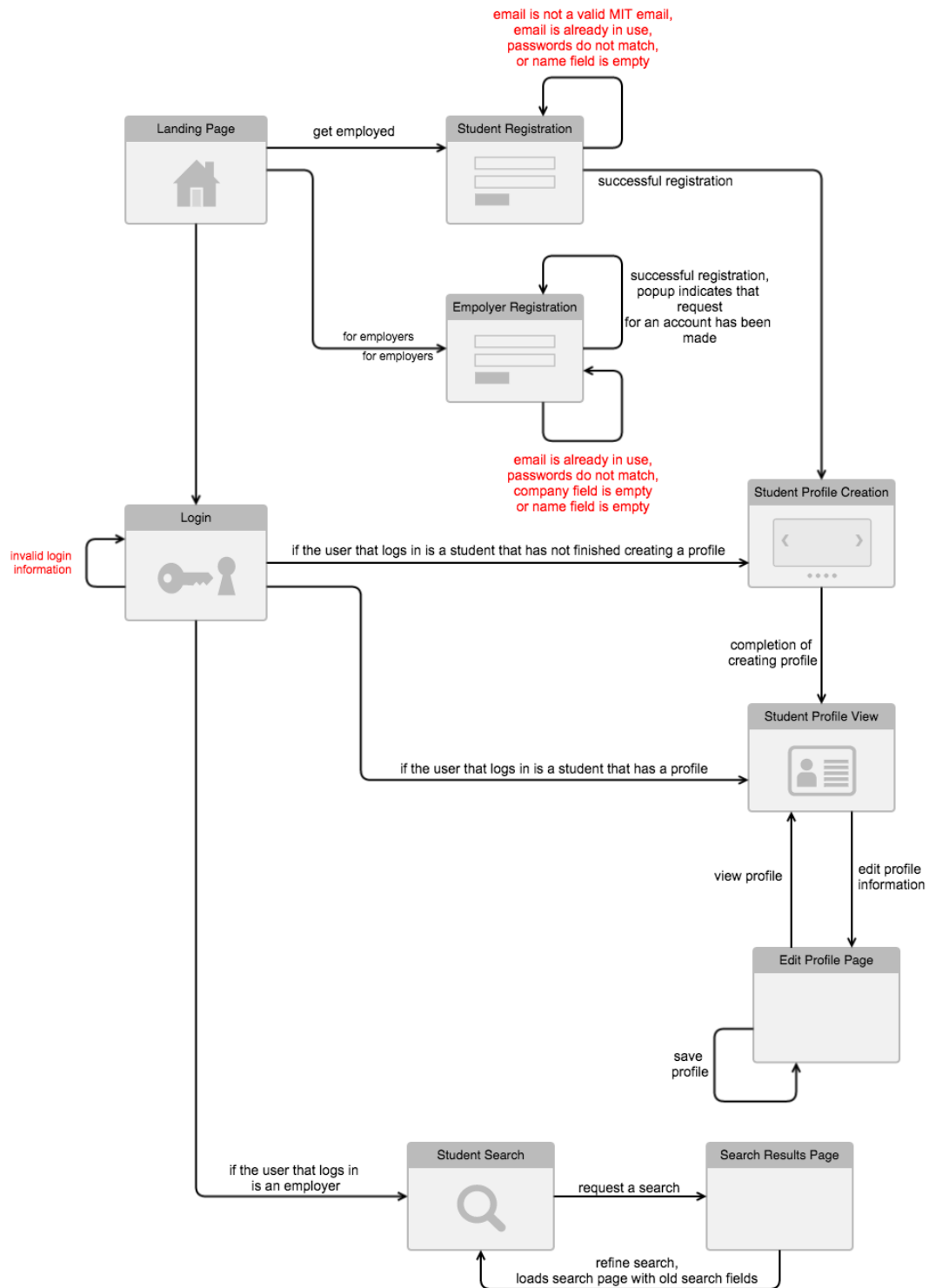
Node.js

Job Interests

Software Engineer

Product Development

Page Flow and Error Handling



Design Challenges

Accurately depict a student's abilities

Options Available:

- Have student input all of their skills and classes
 - Classes and skills are separate and viewable by employers
- Student inputs skills and classes
 - Classes are translated into skills
 - Classes can “endorse” skills

Chosen: option 2 - student input skill, classes are transformed to skills

Evaluation:

Skills that you learn from classes are important. However, students often don't feel comfortable enough with their knowledge in those areas to list them on a resume. We wanted a way to let employers know about the skills and knowledge we acquire from our classes. One way to do this would be to list classes for employers to view. However, this takes a lot of effort on the employer's side to understand what a student could have gained from a class. By abstractive skills from a class and depicting these skills as separate class skills, an employer can learn more about a student.

Easy and descriptive profile

Options Available:

- Pull information from LinkedIn
- Long thorough profile creation
- Short profile creation

Chosen: option 3 - short profile creation

Evaluation:

We want the profile creation process to be short (less than 10 questions). This way more students will be willing to create a profile. However, this becomes a challenge for us as the designers. We need to come up with good questions that can accurately describe a student. This will especially be a challenge if we want to incorporate some sort of personality test (this will probably have to be an option section).

We briefly thought about using LinkedIn to get information about students. However, we found that very few students actually like using LinkedIn, and most likely, their information would be stale and only increase the complexity of our application.