Problem Analysis:

By Elliott Marquez

Purpose:

- Help job / internship applicants keep track of where they applied to.
- Keep track of the user's current status in the application.
- Allow applicants to keep track of what they have and have not done in the application process.
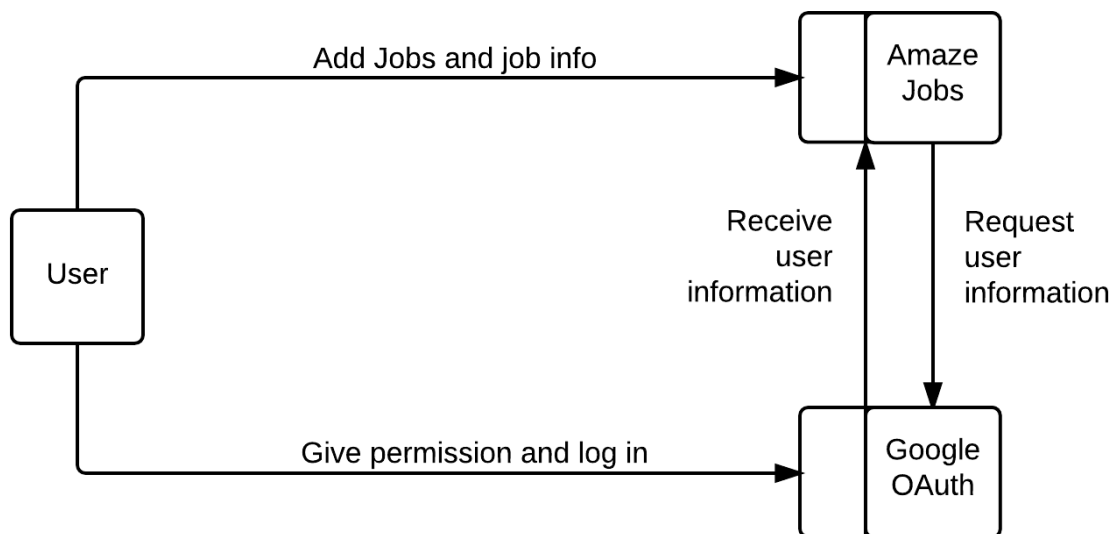
Context:

- Google OAuth
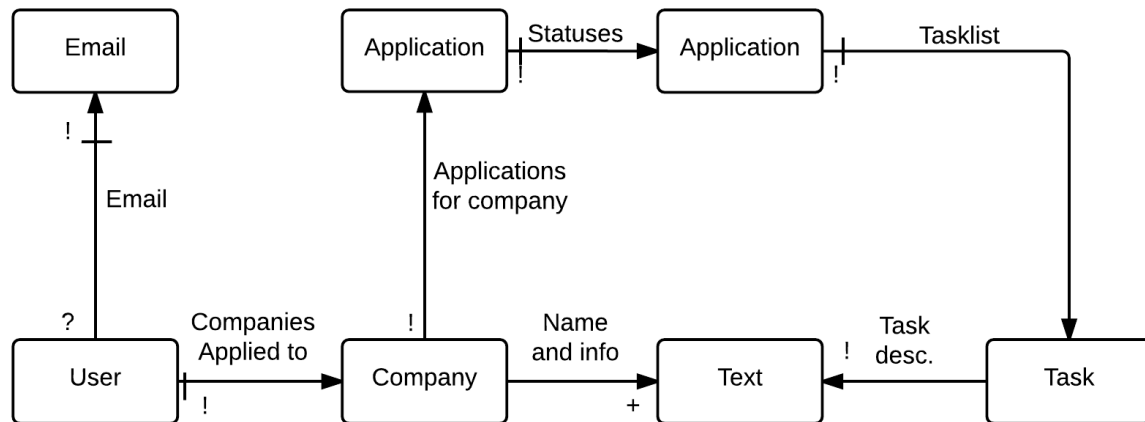 - Will be used to authenticate the user

Concept:

- Keep track of what they have and have not done by implementing a checklist
- Keep track of status in application by having an indicator (applied, accepted, waiting for initial response, etc.)
- Keep user informed about the application by keeping track of company information (descriptions, phone numbers, emails, websites, etc.)

Context Graph:

Data Model:


```
┌─────────┐                  ┌─────────────┐  Statuses  ┌─────────────┐              Tasklist
│  Email  │                  │ Application │───────────▶│ Application │────┐
└─────────┘                  └─────────────┘            └─────────────┘    │
     ▲                              ▲                                      │
     ! ┊                    Applications                                   │
     ┊ Email                for company                                    │
     ┊                              !                                      ▼
     ? ┌────────┐ Companies  ┌─────────┐  Name    ┌────────┐  Task   ┌────────┐
       │  User  │ Applied to │ Company │ and info │  Text  │◀── ! ───│  Task  │
       └────────┘────────────└─────────┘────────▶ └────────┘  desc.  └────────┘
            !                              +
```

Design Challenges:

How to handle authenticating the user

- Options
  - Create login system and keep session cookie
  - Use Google OAuth and create session cookie on success
  - Use Facebook OAuth and create session cookie on success
  - Use certificate for authentication
- Decision
  - Use Google OAuth because we can use it to ask for permissions for other Google apps that Facebook does not provide. Additionally, it is less security responsibility on our side when it comes to creating our own login system. Also, we do not need to force users to have certificates which work differently across operating systems. Issue is that it will require someone to already have a Google account with accurate information.

Whether to associate applications with a company or companies with applications

- Options
  - We can choose to associate applications with companies
  - We can choose to associate companies with applications
- Chose
  - Associate applications with companies because it makes more intuitive sense that you can apply to multiple companies.