Háskólinn í Reykjavík

Kennari: Arnar Leifsson

Design Report

Job Hunters

Group 7

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T-220-VLN 2

Verklegt námskeið 2

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Introduction

We are going to create a job seeking platform.
The platform will be aimed at both job seekers and employers looking for additional employees.

We will use Django and CSS to create and style the website, and PostgreSQL to persist the data.

Building such a platform requires a lot of moving parts. We have been given certain requirements, categorized by priority, that the software must implement.
We are going to focus on implementing the top priority first and work our way down as far as we can.

Before starting to design the implementation of the software, it is important we understand what needs implementing. This is why we will define user groups and construct a requirement list from the demands we were given, as well as create use cases and wireframes to further visualize the requirements.
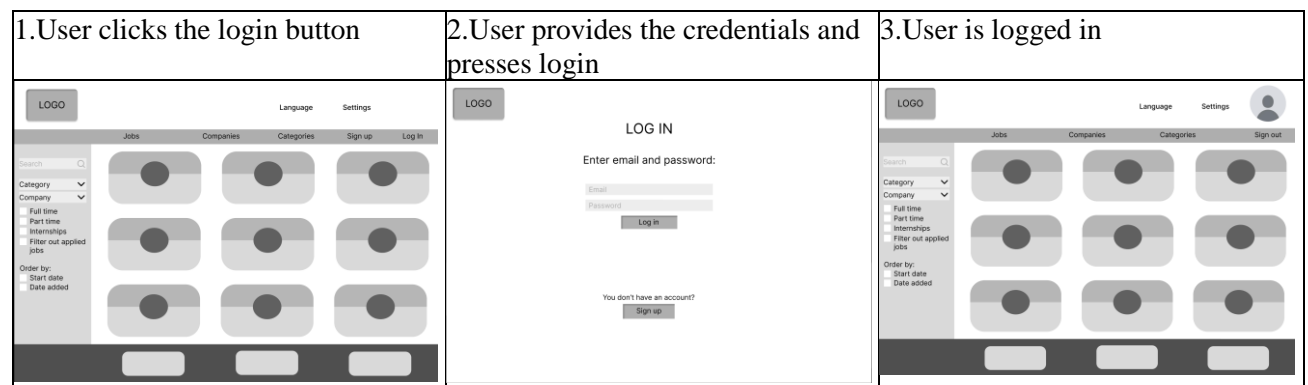
Prototype

We created a prototype which offers a simplified visual depiction of the user interface and the basics of the software layout. We did that through constructing a few happy paths. Happy paths are derived from the use cases and show the steps taken to complete a certain function without any faults. We used Figma to implement that.. The link for the whole prototype is:
https://www.figma.com/file/3DtzP0cul4TpBRjpXkOKeQ/Untitled?type=design&node-id=0%3A1&mode=design&t=7hYsRAuQ1blMvDug-1
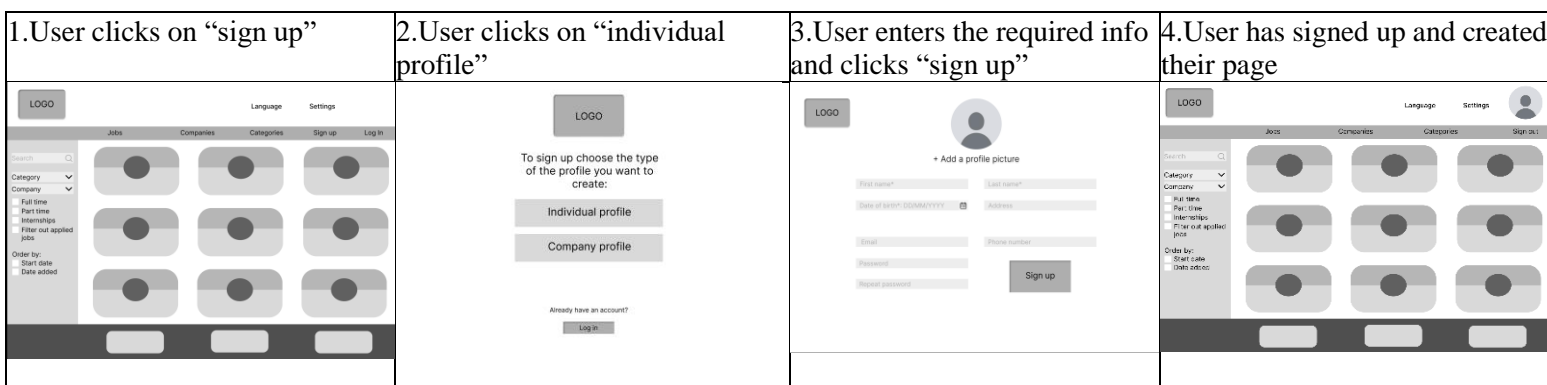And below there is a simple breakdown for the basic functionalities:

1. Login

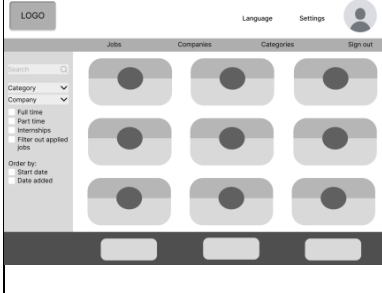| 1.User clicks the login button	2.User provides the credentials and presses login	3.User is logged in
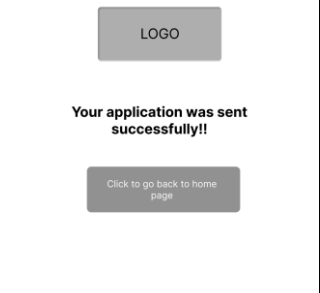
Same thing for companies:

2. Individual Sign up

1.User clicks on "sign up"	2.User clicks on "individual profile"	3.User enters the required info and clicks "sign up"	4.User has signed up and created their page
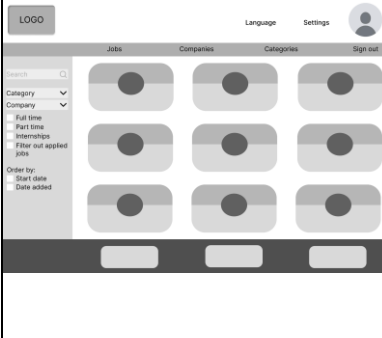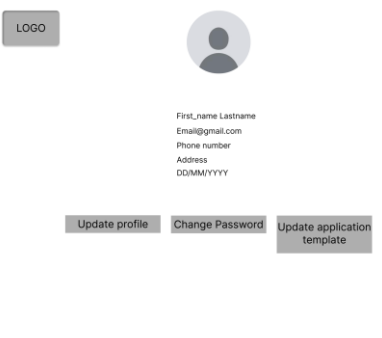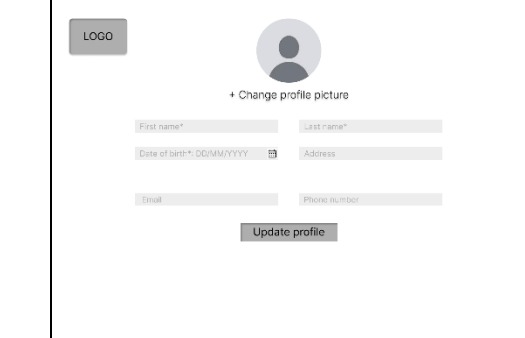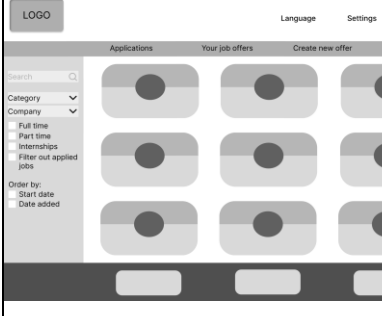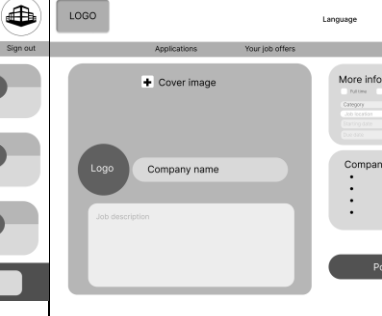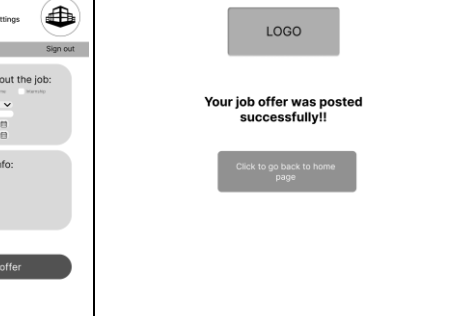
3. Job Application

1.User clicks on one of many jobs	2. User clicks on "apply now"	3. User inserts info and clicks "Submit"	4. User has applied successfully

4. Change Profile

1.User clicks on the profile (the profile picture)	2.User clicks on "Update profile"	3. User inputs the new info and clicks "Update profile" and then it's saved.

5. Posting a Job offer

1.User clicks on "Create new offer"	2. User fills in the fields for the details of the offer page and then clicks "Post offer"	3. The offer gets posted successfully

User Testing

We conducted user testing using the methods of an interview accompanied by a survey/questionnaire on 3 different users. During the sessions, we asked them to complete a series of tasks using our prototype (like signing up, post a job offer, apply to a job offer… etc.), while we observed how their progress. We observed whether they encountered any issues, and what their disposition towards the prototype ended up being. We then asked them for their honest feedback since the aim is to create an intuitive and user-friendly experience. Their opinion was mostly positive, with some very good criticisms and improvement ideas. (Full interview transcripts are in Appendix.)

Class Diagram
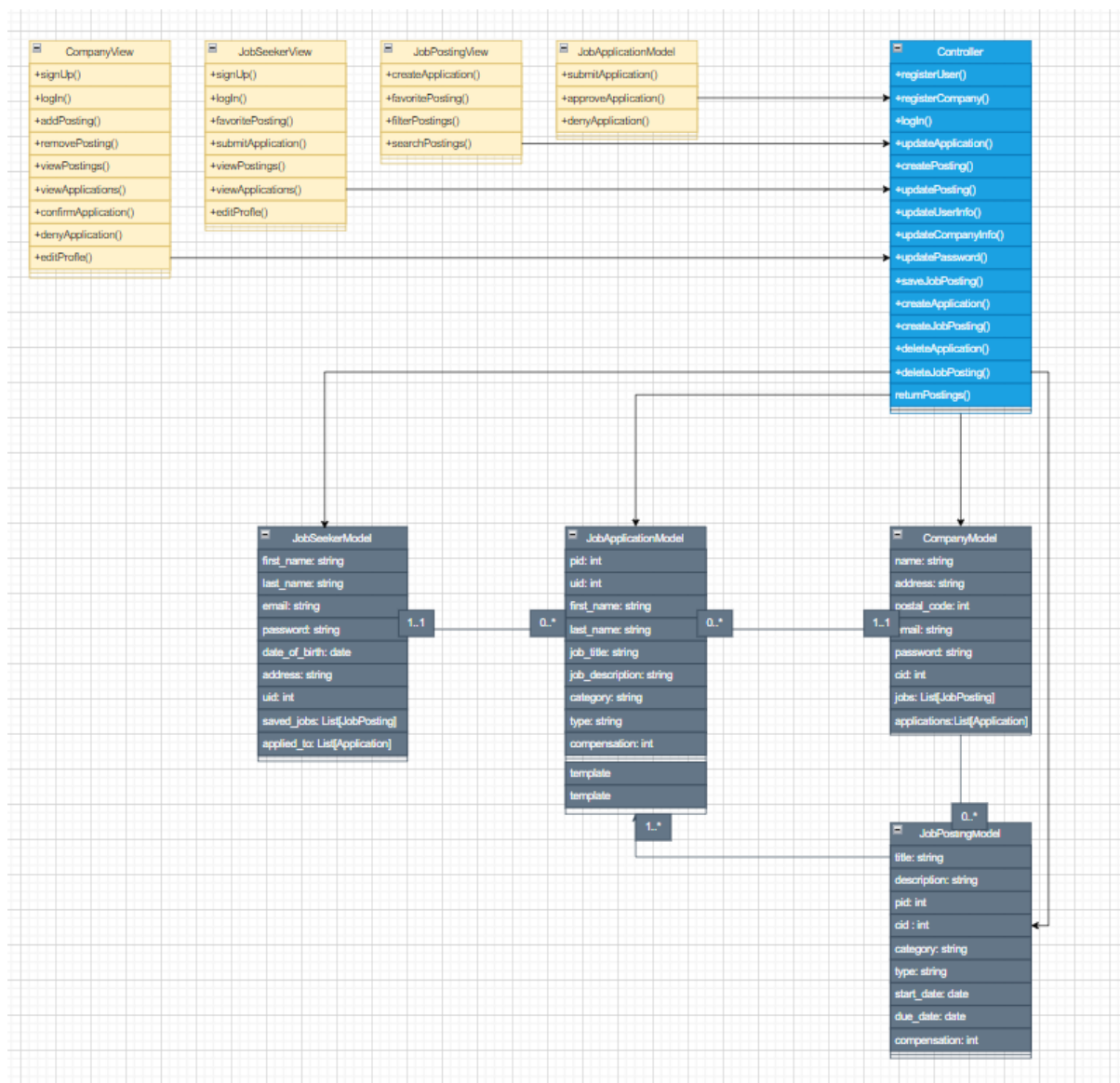
The class diagram shows a controller class which connects and actions methods on models, which are object representations of the data, ands views, which are the templates that are shown in the UI.

Navigation Diagram

The navigation diagram below shows a map of the website users will interact with. The pages and condition checks are colored depending on which users will use them. Red pages are exclusive to company accounts and should not be accessible otherwise, green pages relate to individual job seekers and again should not be accessible unless logged in on an individual account. Blue pages are general exploration and should be accessible to everyone, regardless of login status, and finally cyan are general account related pages which aren't limited to a single account type.
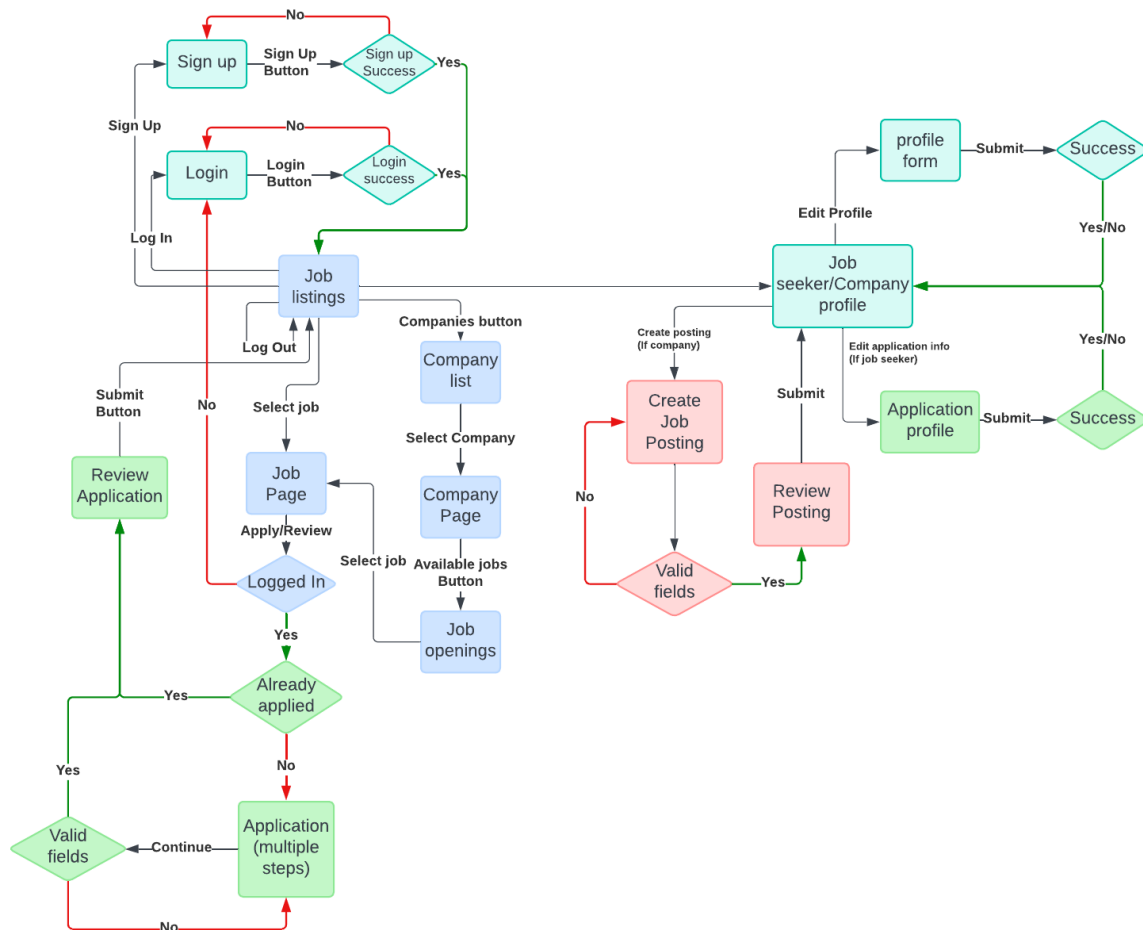
Programming rules

1. Coding Standards
1.1 Naming Conventions
- **Variables and Functions:** Use **snake_case** for variable and function names.
- **Classes:** Use **CamelCase** for class names.
- **Files:** Use **snake_case** for filenames.

1.2 Code Formatting
- Follow PEP 8 for Python code formatting.
- Use 4 spaces per indentation level.

2. Code Structure
2.1 Project Structure
- Organize the project according to the standard Django project layout.
- Keep templates, static files, and media files in their respective directories within each app.

2.2 Modularity
- Write reusable and modular code. Break down large functions or classes into smaller, manageable units.

3. Error Handling
3.1 Error Logging
- Use Django's built-in logging or integrate a third-party service like Sentry for error logging.

3.2 Graceful Failures
- Implement user-friendly error messages for expected issues. For unexpected issues, show a generic error page.

4. Security Guidelines
4.1 Authentication & Authorization
- Use Django's built-in authentication framework. Implement user roles and permissions using Django's **Group** and **Permission** models.

5. Version Control
5.1 Commit Messages
- Write descriptive commit messages. Follow the format: **[Type]: [Short Description]**.

6. Accessibility
6.1 Accessibility Standards
- Follow WCAG 2.1 guidelines for HTML and user interfaces, which defines how to make Web content more accessible to people with disabilities.

7. Documentation
7.1 In-line Comments
- Use comments to explain complex logic or business rules.
- Avoid redundant or obvious comments.

7.2Documentation Standards
- Document code using docstrings, adhering to PEP 257.

8. Collaboration
8.1 Communication
- Use collaborative tools like Discord for communication. Document key decisions and discussions.

ER Diagram
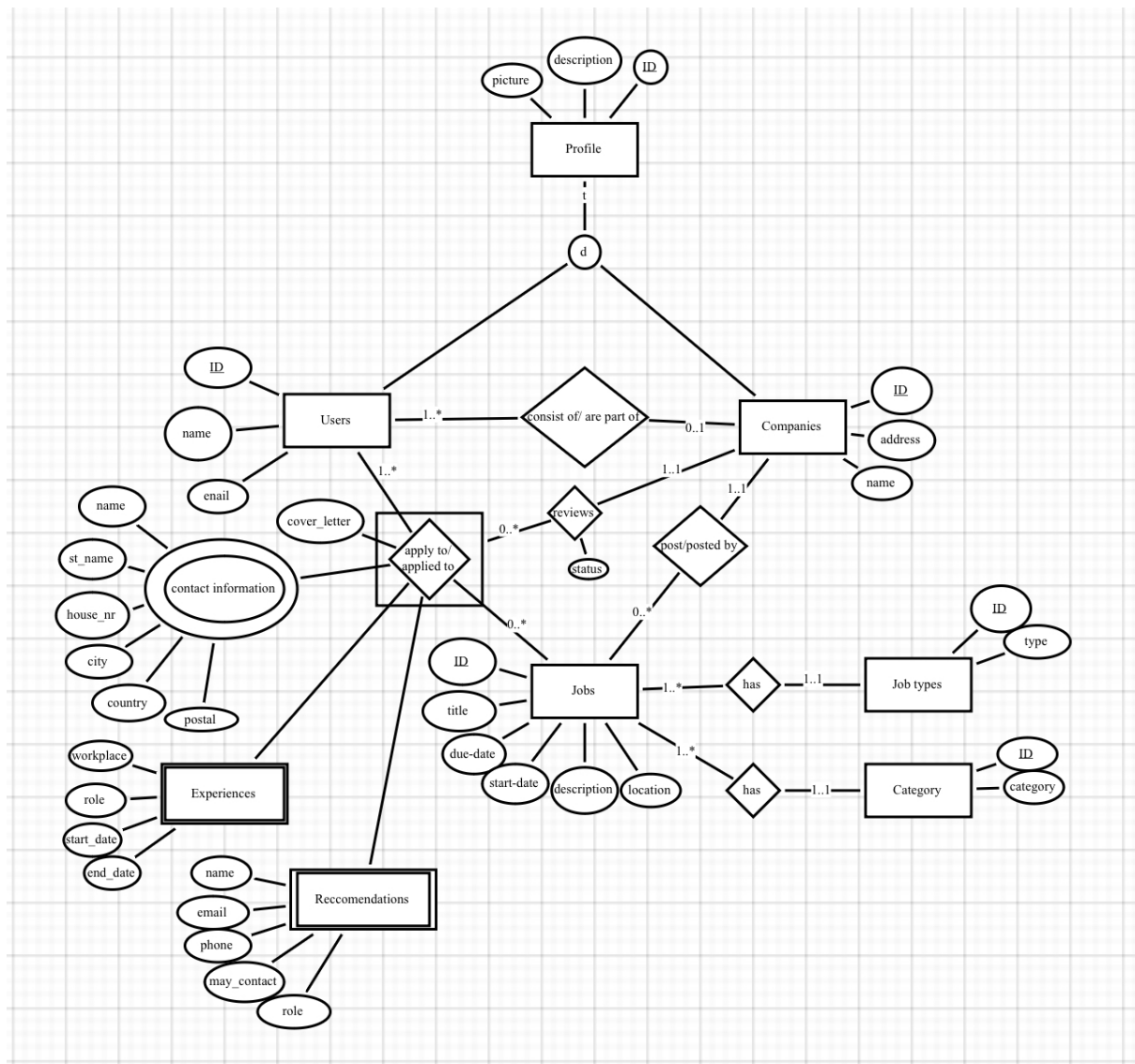
Conclusion

We have now structured the project, with a navigation diagram and a resulting Figma prototype to plan the structure of the website, and a class diagram and ER-diagram to structure the internal workings of the backend and database, respectively. We are now prepared to begin making the site itself.

Next steps:

In this report, company access to the site is handled by a single company account. This is a simple implementation which might suffice for the project in the short term, but in reality would end up being opaque and insecure in the long term. If time allows, we will restructure the site to handle one or more user accounts affiliated with a company, allowing individual accounts with access to create and handle job postings on the company's behalf.

Appendix

User 1	
Welcome! We're excited to have you here. Today, we'd like to gather your feedback on our job seeker website prototype. Have you participated in user testing sessions before, or is this your first time?	Yeah, I've been in a few user testing sessions before. Always interesting to see how different platforms approach usability and design.
Can you briefly describe your experience with job-seeking websites?	I've used job-seeking websites quite a bit, especially earlier in my career. They're a valuable tool for finding new opportunities and staying updated on industry trends.
What are the main factors you consider when using such platforms?	For me, the main factors are ease of use, the quality of job listings, and how well the platform matches me with relevant opportunities.
Have you used our website prototype before, or is this your first time?	This is my first time using your website prototype. Excited to see what you've got!
Task 1: Signing Up Could you please sign up for an account on our website? Share your thoughts as you go through the process.	Signing up was a breeze. The form was straightforward, and I appreciated that it didn't ask for too much unnecessary information. It felt like a good balance between getting what they need and respecting my time.
Task 2: Logging In Now, please log in using the credentials you just created. How intuitive was the login process for you?	Logging in was smooth sailing. I've seen too many platforms with clunky login processes, but this one was refreshingly simple. A couple of clicks and I was in, no fuss.
Task 3: Searching for a Job Posting Using Filters Let's say you're looking for a software engineering position in New York. Please use the search and filter options to find relevant job postings.	The search and filter options were decent. I was able to narrow down my search criteria pretty easily, although I wish there were a few more advanced filters. For instance, it would've been handy to filter by specific programming languages for tech roles.
Task 4: Applying for a Job Great! Now that you've found a job posting that interests you, please go ahead and apply for it.	Applying for a job was a straightforward process. The interface was intuitive, and I didn't encounter any hiccups along the way.
Task 5: Editing Your Profile Lastly, let's update your profile information. Can you navigate to the profile editing section and make some changes, like updating your resume or contact details?	Editing my profile was a breeze. The interface was intuitive, and I was able to update my information without any issues. It's always a plus when platforms make it easy to keep your profile up to date.
What was your overall experience like while completing these tasks?	
Before we conclude, is there anything else you'd like to share or any questions you have for us?	Not really, everything seemed pretty solid. Just keep iterating based on user feedback, and you'll be golden.
User 2	
Welcome! We're excited to have you here. Today, we'd like to gather your feedback on our job seeker website prototype. Have you participated in user testing sessions before, or is this your first time?	Yeah, I've participated in user testing sessions before. As a UX designer, it's always insightful to see how users interact with different interfaces.
Can you briefly describe your experience with job-seeking websites?	Job-seeking websites have been a staple in my career journey. As a designer, I pay close

	attention to the user experience and interface design of these platforms.
What are the main factors you consider when using such platforms?	As a UX designer, I prioritize usability, visual appeal, and the overall user experience. I also value platforms that offer personalized recommendations and easy profile management.
Have you used our website prototype before, or is this your first time?	This is my first time using your website prototype. Looking forward to exploring it!
Task 1: Signing Up Could you please sign up for an account on our website? Share your thoughts as you go through the process.	Signing up was a pleasant experience overall. The form was clean and well-designed, making it easy to input my information. However, I did notice a lack of guidance on password requirements, which could lead to users creating weak passwords unintentionally.
Task 2: Logging In Now, please log in using the credentials you just created. How intuitive was the login process for you?	Logging in was straightforward, but I feel there's room for improvement in terms of feedback. A subtle loading animation or message upon clicking the login button would reassure users that their action was registered, preventing any uncertainty or double-clicking.
Task 3: Searching for a Job Posting Using Filters Let's say you're looking for a software engineering position in New York. Please use the search and filter options to find relevant job postings.	The search and filter options were decently intuitive, although I found the filter categories a bit generic. Adding more context or tooltips could help users understand the options better, especially those who might not be familiar with job search terminology.
Task 4: Applying for a Job Great! Now that you've found a job posting that interests you, please go ahead and apply for it.	Applying for a job was a smooth process overall.
Task 5: Editing Your Profile Lastly, let's update your profile information. Can you navigate to the profile editing section and make some changes, like updating your resume or contact details?	Editing my profile was straightforward, thanks to the clear layout and labeling. One suggestion for improvement would be to incorporate inline validation for fields with specific formatting requirements, such as phone numbers or email addresses, to prevent errors before submission.
Before we conclude, is there anything else you'd like to share or any questions you have for us?	I hope you are planning to incorporate more user feedback tools directly into the platform for continuous improvement.
User 3	
Welcome! We're excited to have you here. Today, we'd like to gather your feedback on our job seeker website prototype. Have you participated in user testing sessions before, or is this your first time?	This is my first time participating in a user testing session. Pretty curious to see how it goes.
Can you briefly describe your experience with job-seeking websites?	I've used job-seeking websites on and off over the years. They're handy for finding new opportunities, but sometimes the user experience can be hit or miss.
What are the main factors you consider when using such platforms?	As an IT support specialist, I look for platforms that are easy to navigate, have accurate job listings, and provide timely updates on application statuses.

Have you used our website prototype before, or is this your first time?	Yep, this is my first time checking out your website prototype. Let's see what you've got going on.
Task 1: Signing Up Could you please sign up for an account on our website? Share your thoughts as you go through the process.	Signing up was pretty standard. The form was easy to fill out, but I noticed it didn't have any tooltips or help icons for certain fields, which could be confusing for some users, especially those less tech-savvy.
Task 2: Logging In Now, please log in using the credentials you just created. How intuitive was the login process for you?	The process was simple and quick, which is exactly what you want.
Task 3: Searching for a Job Posting Using Filters Let's say you're looking for a software engineering position in New York. Please use the search and filter options to find relevant job postings.	The search and filter options were alright, but I found myself wishing for a bit more flexibility. It would be helpful to have the option to save custom search filters for future use.
Task 4: Applying for a Job Great! Now that you've found a job posting that interests you, please go ahead and apply for it.	The steps were clear, and I didn't run into any issues. The only thing I'd suggest is maybe adding a progress indicator so users know how far along they are in the application process.
Task 5: Editing Your Profile Lastly, let's update your profile information. Can you navigate to the profile editing section and make some changes, like updating your resume or contact details?	Editing my profile was easy enough. Everything was where I expected it to be, and I didn't encounter any surprises. Overall, a pretty painless experience.
Before we conclude, is there anything else you'd like to share or any questions you have for us?	Nope, nothing else from me. Just keep refining the platform, and you'll attract more users in no time.