

Háskólinn í Reykjavík

Kennari: Arnar Leifsson



Requirements Analysis Report

Job Hunters

Group 7

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Verklegt námskeið 2

Table of Contents

Introduction	3
User Groups	3
Requirement list	5
Use Cases	8
Happy paths	12
Conclusion.....	14
Appendix A: Interview questions.....	15
• Interview 1:.....	15
• Interview 2:.....	16
• Interview 3:.....	17
• Interview 4:.....	18

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.

User Groups

When building software, it is important to always be aware of who the users are. The users of this software can be split into two user groups: Job seekers and Employers. The Job seekers can create a profile, log in, edit their profile, look up jobs, filter them, apply for them, and then track the status of their applications. The Employers can create a page, offer jobs, and go through the job applications. When analyzing the two user groups we used the “5 W ‘s and 1 H” method which stands for who, what, why, where when and how. Here below is an organized table of the analysis of the two user groups.

User groups	Job Seekers	Employers
Who / Background	<p>Who: People who are looking for jobs.</p> <p>Age: 16+</p> <p>Gender: Non-specific</p> <p>Education: Big variety of educations, basically anything.</p> <p>Abilities/disabilities: Mobility disabilities or none disabled people.</p> <p>User Skill Groups: Beginner Users / Intermediate Users / Expert Users</p> <p>General computer knowledge: Beginner/ Intermediate / Expert</p>	<p>Who: People/Business owners who are looking for new employees.</p> <p>Age: 21+</p> <p>Gender: Non-specific</p> <p>Education: Big variety of educations, but most likely:</p> <ul style="list-style-type: none"> • Business Administration - Human Resources Management - Project Management <p>Abilities/disabilities: Mobility disabilities or none disabled people.</p> <p>User Skill Groups: Beginner Users/Intermediate Users / Expert Users</p> <p>General computer knowledge: Beginner/ Intermediate / Expert</p>
What / Equipment	Computer/ mobile/ tablet	Computer/ mobile/ tablet
Why / Main Goals	This user group must be able to create and edit their profile, log in, look for job offers, filter them based on some criteria, apply for them, and then track the status of their application. Their goal is to have the ability to be able to find and apply for jobs in a convenient and efficient way.	This user group needs to have the ability to create their own page, edit it, offer jobs through it, and go through received applications.
Where / Environment	<p>The real Environment: Not specific.</p> <p>Technical Environment: The software is going to be used via computer, mobile, or tablet.</p>	<p>The real Environment: The software is going to be used at work offices.</p> <p>Technical Environment: The software is going to be used via computer, mobile, or tablet. But most often on a computer.</p>
When / Usage of System	<p>How often: Not specific. It depends on the user.</p> <p>How long each time: 1-2 hours.</p>	<p>How often: Daily most likely.</p> <p>How long each time: A couple of hours.</p>
How / Important	important.	Very important.

Requirement list

Requirements are an essential part of the software development process. Requirements are statements that outline what a product should do, how it should look, and how it should behave to meet the needs and expectations of its users. They can work as a checklist for the developers. Each requirement should only consist of a single function. We split the requirements into two different types: functional and non-functional requirements. The main difference is that functional requirements describe what the product will do, and non-functional requirements describe the characteristics of the product and how well the user experience should be. Each requirement, as we do them, takes prioritization A, B, and C where A: essential (core), B: useful, but not mission critical and C: nice to have. It is also clarified for which user group the requirement applies to.

Functional requirements

Nr.	Requirement description	User groups	Priority order
1	As a user I must be able to navigate to different pages with ease using a navigation bar and a footer.	Job Seekers - Employers	A
2	As a user I must be able to create a profile	Job Seekers - Employers	A
3	As a user I must be able to edit my profile to keep it up to date.	Job Seekers - Employers	A
4	As a user I must be able to change my profile picture.	Job Seekers - Employers	A
5	As a user I must be able log in to my profile by providing the right credentials.	Job Seekers - Employers	A
6	As a user I must be able to look for job offers.	Job Seekers	A
7	As a user I must be able to find jobs by their category.	Job Seekers	A
8	As a user I must be able to find jobs by company.	Job Seekers	A
9	As a user I must be able to search for jobs by their name.	Job Seekers	A
10	As a user I must be able to look up the job offers that I already applied to.	Job Seekers	A
11	As a user I must be able to find jobs by their type (full time/ part time/ internship...).	Job Seekers	A
12	As a user I must be able to order my search results by the date of offering & due date of offering.	Job Seekers	A
13	As a user I would like to be able to select a job to see more information about it	Job Seekers	A
14	As a user I would like to see the job title of a job offer that I select.	Job Seekers	A
15	As a user I would like to see the time investment of a job I select (part/full time).	Job Seekers	A

16	As a user I would like to see the location of a job I select.	Job Seekers	A
17	As a user I would like to see when the job posting of a job I select expires.	Job Seekers	A
18	As a user I would like to see a description of a job that I selected.	Job Seekers	A
19	As a user I would like to apply for jobs with ease with the use of a button.	Job Seekers	A
20	As a user I would like to find pages about various companies.	Job Seekers	A
21	As a user I would like for company pages to have their logo displayed.	Job Seekers	A
22	As a user I would like for company pages to have their name displayed.	Job Seekers	A
23	As a user I would like to see the companies address displayed on the company pages.	Job Seekers	A
25	As a user I would like to see companies have descriptions about them on the company page.	Job Seekers	A
26	As a user I would like a page that makes it easy to apply to a job.	Job Seekers	A
27	As a user I would like to see more information about the company that posted a job that I select, like name and address... etc.	Job Seekers	A
28	As a user I would like for company pages to have the job offers that have not reached their due date displayed.	Job Seekers	A
29	As a user I would like to see at what time a job that I select starts.	Job Seekers	A
30	As a user I must be able to track the status of the jobs I've applied to and read the review or the confirmation if there's any.	Job Seekers	A
31	As a user I must be able to create a page for my company or workplace.	Employers	A
32	As a user I must be able to edit my workplace page.	Employers	A
33	As an employer I should be able to create job offers when I'm looking for a new employee.	Employers	A
34	As an employer I should be able to add a logo image of my workplace.	Employers	A
35	As an employer I must be able to see all the applications I get for each offer I make.	Employers	A
36	As an employer I must be able to go through the details of each application individually.	Employers	A
37	As an employer I must be able to add my workplace title.	Employers	A
38	As an employer I must be able to add my workplace address.	Employers	A
39	As an employer I must be able to add a cover image for my workplace.	Employers	A
40	As an employer I must be able to add a description of my workplace.	Employers	A
41	As an employer I must be able to list all my job offers.	Employers	B
42	As an employer I must be able to edit job offers even after they have been created.	Employers	B

43	As an employer I must be able to delete a job offer.	Employers	B
44	As a user I must be able to save my info to automatically fill in new applications.	Job Seekers	B
45	As a user I must be able to see how many jobs offers I have applied to within a specific company.	Job Seekers	C

Non-functional requirements

Nr.	Requirement description	Priority order
1	User data should be securely stored and transmitted.	A
2	Authentication and authorization mechanisms should be implemented to ensure only authorized users can access certain features.	A
3	The website should be intuitive and have a responsive design.	A
4	The software should get a UX score 8 or higher	A
5	Minimal data loss and fast recovery in case of system failure.	A
6	The website should be accessible on different devices like computers, mobiles, tablets...etc.	A
7	The system should provide clear error messages.	A
8	The system should be scalable to accommodate future growth in users and data volume.	A
9	Website architecture should support easy scaling of resources as needed.	A

Inspiration

We decided to take a little look at apps that have a similar goal in mind and found a few that fit the bill. LinkedIn and Alfreð came to mind as big platforms in this space. Where we mainly wanted to differ from these is that a lot of jobs send you to different forums for the application process but we want it to be all done on our platform no external applications to make things easier on people who want to apply in multiple places rapidly.

Use Cases

Use cases are essentially descriptions of how users will do certain tasks in our system. They are a great way to help give a better understanding about the flow of the software. All these use cases are written with the requirements above in mind. Not only are the use cases good to show the user how certain actions will behave in our software, but they are also great for spotting what might go wrong while taking these actions and going through the system.

Name	User applies for a job
Number	1
Priority	A
Precondition	User is logged in.
Description (base flow)	A job seeker can select a job posting and choose to apply for it, inputting the required info into forms and submitting.
Main success scenario	<ol style="list-style-type: none">1. The user filters the job postings by their desired criteria.2. The user selects a job posting and gets a page with all info about it.3. The user presses the apply button to go to a series of forms.4. The user inputs all required info while being able to go back and forth in the forms as needed.5. The user presses submit on the final page to send in their application.
Alternative flow	
Post condition	Application has been sent in and is saved on the server.
Source (requirements)	Mainly 19, also includes 1, 5-9, 11-18, 26
Actors	Job seeker
Author	Bergur Halldórsson
Extensions:	

Name	User checking applications they have already made
Number	2
Priority	A
Precondition	User is logged in.
Description (base flow)	A job seeker can see a list of all currently active applications and review the info for each one.
Main success scenario	<ol style="list-style-type: none"> 1. The user filters job postings to only see ones they have already applied for. 2. The user selects a job posting and gets a page with all info about it. 3. The user presses a button to see the information they supplied on that application and see the status of the application.
Alternative flow	
Post condition	User has reviewed an application
Source (requirements)	Mainly 10, includes 1
Actors	Job seeker
Author	Bergur Halldórsson
Extensions:	

Name	Registering a new company profile
Number	3
Priority	A
Precondition	User is logged in.
Description (base flow)	An employer can create a profile for their company.
Main success scenario	<ol style="list-style-type: none"> 1. The user selects "Create new company" from the navigation bar. 2. The user goes to a form and inputs all the info they want to share about their company. 3. Once the company is registered, the user chooses to create a new job posting on behalf of the company. 4. The user inputs required info about the job and then presses submit.
Alternative flow	
Post condition	The company info is saved and can be seen by other users.
Source (requirements)	Mainly 31, includes 1, 32, 34-40
Actors	Employer
Author	Bergur Halldórsson
Extensions:	

Name	Creating a job posting for a company
Number	4
Priority	A
Precondition	User is logged in and is affiliated with a company profile.
Description (base flow)	An employer can create job postings linked to that company.
Main success scenario	<ol style="list-style-type: none"> 1. The user selects "Create posting" from the navigation bar. 2. They then select the company. 3. The user inputs job information into a form. 4. Finally, the user presses the "Submit" button to post the job offering.
Alternative flow	
Post condition	The job posting info is saved and can be seen by other users.
Source (requirements)	Mainly 33
Actors	Employer
Author	Bergur Halldórsson
Extensions:	

Name	Employer viewing applications for a position
Number	5
Priority	A
Precondition	User is logged in.
Description (base flow)	An employer can select one of their job postings, and then go through the applications that have been received for the job.
Main success scenario	<ol style="list-style-type: none"> 1. The user filters the job postings to find the one they want. 2. The user goes to the page for that posting. 3. Since they created the posting, they have the option of viewing received applications. 4. The user sees a list of applications, with some basic info about each, and can select one to see more detail.
Alternative flow	
Post condition	Employer has viewed a prospective employee's application.
Source (requirements)	Mainly 35
Actors	Employer
Author	Bergur Halldórsson
Extensions:	

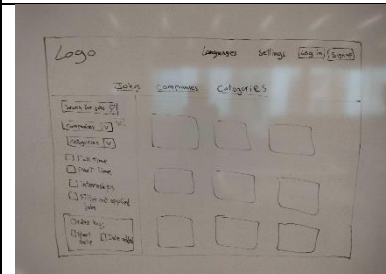
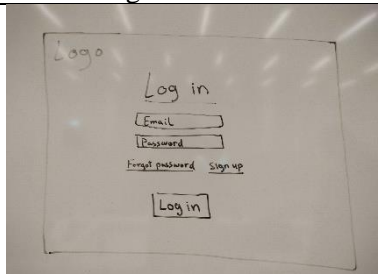
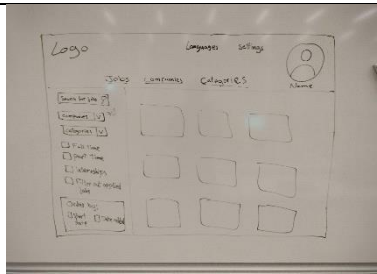
Name	Job seeker changes their profile info
Number	6
Priority	A
Precondition	User is logged in.
Description (base flow)	The user goes to their profile page and changes their profile info from there.
Main success scenario	<ol style="list-style-type: none"> 1. The user goes to the profile page 2. The user then clicks the update info button 3. Finally, the user fills in a form with the updated info.
Alternative flow	
Post condition	The user's profile is changed.
Source (requirements)	Mainly 3, includes 4,5
Actors	Job seeker
Author	Bergur Halldórsson
Extensions:	

Name	User signs up
Number	7
Priority	A
Precondition	None
Description (base flow)	A visitor clicks sign up, gives a username and password, and creates a new account.
Main success scenario	<ol style="list-style-type: none"> 1. A user who is not logged in clicks the "Sign up" button. 2. The user then fills in the username and password fields. 3. The user clicks "Submit" to create the new account.
Alternative flow	
Post condition	The new account is created and saved, and the user is logged in.
Source (requirements)	Mainly 2
Actors	Any user
Author	Bergur Halldórsson
Extensions:	

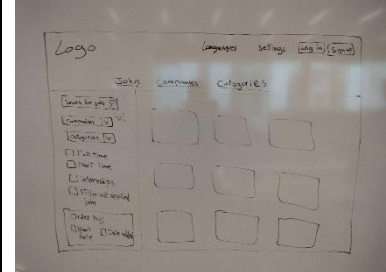
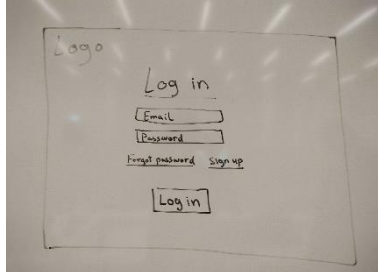
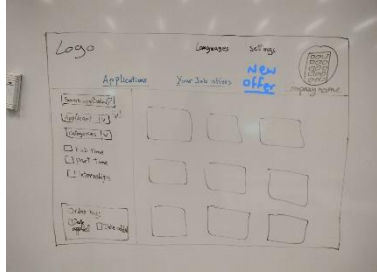
Happy paths

We created wireframes which offer a simplified visual depiction of the user interface and software layout. We used the wireframes to construct 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. Here below you can see our happy paths.

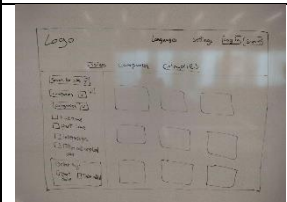
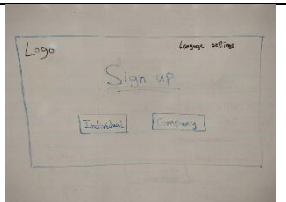
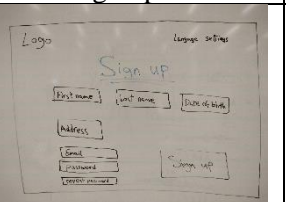
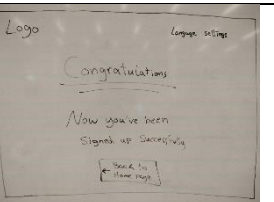
1. Login

1. User clicks the login button	2. User provides the credentials and presses login	3. User is logged in
		

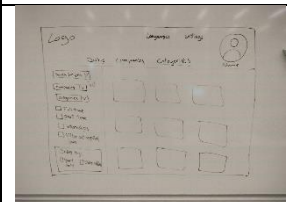
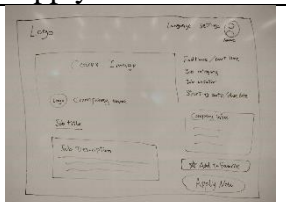
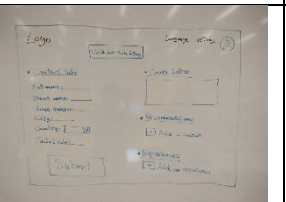
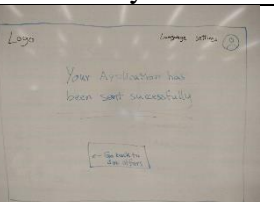
Same thing for companies:

		
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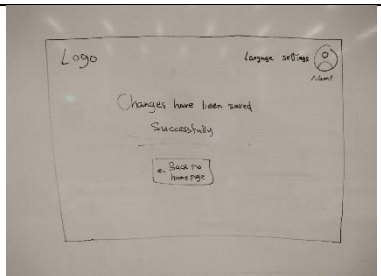
2. Individual Sign up

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

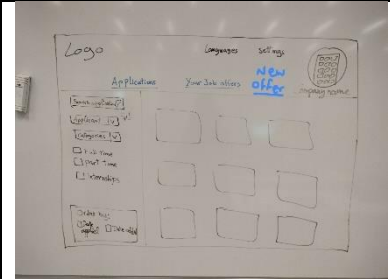
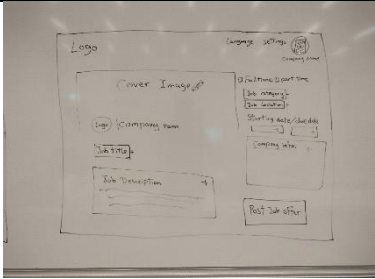
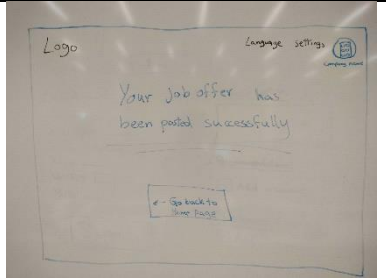
3. Job Application

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 inputs the new info and clicks "save changes"	3. The changes gets saved
		

5. Posting a Job offer

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

Conclusion

In this design brief we have analyzed the user groups, constructed a requirement list, created use cases and created happy paths with wireframes. These things are essential for us to make detailed designing, and ultimately coding, more efficient.

Appendix A: Interview questions

• Interview 1:

1_ Background & prior experience:	Answers:
To start with, can you tell me about your background, education, experience, etc.?	I've been working as an Engineer for 2 years. I do live alone and have been now for about a year. I've recently begun the hunt for another job as I would like to explore more opportunities.
How much time would you say you normally spend online?	Quite a lot these days, it can be quite hard to disconnect entirely if not impossible.
Have you used sites to either apply for jobs yourself or look for applicants for a job? (Alfred.is, etc.) If so, which one?	Yeah, I have, I've mainly used the one you just mentioned, Alfred.
If so, how was your experience using such sites, both in terms of user experience and results?	I'd say the app is pretty nice, easy to use and the results were quite good, even landed my current gig through there.
Do you have any particularly good experiences using such sites?	Yeah, as I said before I landed my current job through a platform like that, and they sometimes make the application process easier.
Do you have any particularly bad experiences using such sites?	I hate it when the application process is not seamless, like page after page for each application you make.
If you use these sorts of sites, what would you say are the most notable features?	The search features I think are important, you can't get a job if you can't find it.
2_ Wireframe & prototype testing:	
"Here is a prototype we did for the site layout. I would like to see you go through it and test some basic functionality. If you see anything that you think could be improved or if anything appears even slightly unclear, please mention it, so that it can be improved."	Ok, everything seems straight forward so far.
After testing:	
What did you think of the site design?	It was functional in its layout though a bit basic.
How did the problem solving go in your opinion?	I solved all tasks with minimal effort.
Was there anything you particularly liked about our site?	It had some useful filtering options when searching for job offers.
Was there anything you particularly disliked?	The visual, it felt very old school.
Anything you want to add at the end?	Thank you for the interview. It was fun.

• Interview 2:

1_ Background & prior experience:	Answers:
To start with, can you tell me about your background, education, experience, etc.?	I've worked in a variety of fields over the years, primarily in customer service and tech support. I don't have a formal university education, but I've taken numerous online courses in web design and development, which have really helped me understand the digital workspace better.
How much time would you say you normally spend online?	I spend quite a bit of time. On average about 6-8 hours daily.
Have you used sites to either apply for jobs yourself or look for applicants for a job? (Alfred.is, etc.) If so, which one?	Yes, I've used several job sites like Indeed and LinkedIn.
If so, how was your experience using such sites, both in terms of user experience and results?	My experience has been mixed. The user experience is generally good; these sites are well designed and easy to navigate. However, the results can vary. Sometimes you get good leads quickly, other times it can feel like you're sending applications into a void.
Do you have any particularly good experiences using such sites?	A particularly good experience was when I applied for a tech support role through LinkedIn and got a response within a week. The process was straightforward.
Do you have any particularly bad experiences using such sites?	A bad experience involved a less known job portals. Where the job postings were often outdated, and I would only find out after applying and hearing back weeks later that those positions had been filled.
If you use these sorts of sites, what would you say are the most notable features?	Effective filtering options are crucial. Being able to narrow down the search according to specific criteria (like location, salary, company size.... etc.) really helps.
2_ Wireframe & prototype testing:	
"Here is a prototype we did for the site layout. I would like to see you go through it and test some basic functionality. If you see anything that you think could be improved or if anything appears even slightly unclear, please mention it, so that it can be improved."	Looking at the prototype, I noticed that the navigation is intuitive, which is great!
After testing:	
What did you think of the site design?	The site design looks clean. I liked the minimalist approach, as it makes it easier to focus on the content.

How did the problem solving go in your opinion?	The problem-solving aspect seems well thought out. I don't feel like I encountered any problems with it.
Was there anything you particularly liked about our site?	I liked how it looks easy to adjust the search filters or parameters.
Was there anything you particularly disliked?	Even though the design looks intuitive, but I feel it's kind of basic or repeated in a sense.
Anything you want to add at the end?	No I think this is it, thank you so much!

• Interview 3:

1_ Background & prior experience:	
To start with, can you tell me about your background, education, experience, etc.?	I have a B.Sc. in industrial engineering and currently work in data management.
How much time would you say you normally spend online?	I'm probably online at least 5-6 hours per day.
Have you used sites to either apply for jobs yourself or look for applicants for a job? (Alfred.is, etc.) If so, which one?	Yeah, I've used Alfred and been part of a hiring process involving 50skills.
If so, how was your experience using such sites, both in terms of user experience and results?	Alfred.is was fine, although the filters weren't great at filtering job types. Useful to be able to set up a profile. 50skills was very useful, it uses columns to filter applicants.
Do you have any particularly good experiences using such sites?	Not really, both sites were fine, but nothing particularly stands out.
Do you have any particularly bad experiences using such sites?	Annoying to have to fill in info more than once in an application.
If you use these sorts of sites, what would you say are the most notable features?	Profile, some way to filter what you see.
2_ Wireframe & prototype testing:	
"Here is a prototype we did for the site layout. I would like to see you go through it and test some basic functionality. If you see anything that you think could be improved or if anything appears even slightly unclear, please mention it, so that it can be improved."	
After testing:	
What did you think of the site design?	Seems pretty good so far. Not sure about what the categories option in the navigation bar at the top does.
How did the problem solving go in your opinion?	It went well.
Was there anything you particularly liked about our site?	Nothing specific.
Was there anything you particularly disliked?	Not really.
Anything you want to add at the end?	Not really.

• Interview 4:

1_Background & prior experience:	Answers:
To start with, can you tell me about your background, education, experience, etc.?	I've been working in digital marketing for the past five years with a focus on social media strategy. I graduated with a degree in Marketing.
How much time would you say you normally spend online?	I'm online a lot, probably around 7-10 hours a day.
Have you used sites to either apply for jobs yourself or look for applicants for a job? (Alfred.is, etc.) If so, which one?	Yes, I've used several platforms like Alfred as you mentioned and also fiverr and other similar websites.
If so, how was your experience using such sites, both in terms of user experience and results?	The experience has generally been positive. I find that these platforms make it easy to connect with potential employers.
Do you have any particularly good experiences using such sites?	One great experience was finding a job at a startup that was exactly in my niche. The process was fast, and the job ad was clear.
Do you have any particularly bad experiences using such sites?	A negative experience was with a site that had many listings that were either outdated or not relevant to my searches, which was frustrating.
If you use these sorts of sites, what would you say are the most notable features?	Good search functionality is key. I also appreciate it when sites provide insights into whether my application has been viewed and any feedback from the employer.
2_Wireframe & prototype testing:	
"Here is a prototype we did for the site layout. I would like to see you go through it and test some basic functionality. If you see anything that you think could be improved or if anything appears even slightly unclear, please mention it, so that it can be improved."	I noticed the user interface is clean and user-friendly, which in my opinion is really important!
After testing:	
What did you think of the site design?	The design is appealing, and straightforward and makes good use of space without feeling overwhelmed.
How did the problem solving go in your opinion?	Problem solving seems effective. I was able to navigate through different scenarios without any struggles.
Was there anything you particularly liked about our site?	I liked the navigation bar. It looks intuitive.
Was there anything you particularly disliked?	It might be beneficial to optimize the layout a bit more for smaller screens.
Anything you want to add at the end?	No, I think I have said everything I wanted to.