

# Extended Custom Project Report

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Date: 10-10-2025

## Link to Questionnaire Created for Usability Testing

[https://docs.google.com/forms/d/e/1FAIpQLSeb1VRQwKroKGBMjrJnbuZVfkW\\_0c8dvguAbJiezSuvfDRZig/viewform?usp=header](https://docs.google.com/forms/d/e/1FAIpQLSeb1VRQwKroKGBMjrJnbuZVfkW_0c8dvguAbJiezSuvfDRZig/viewform?usp=header)

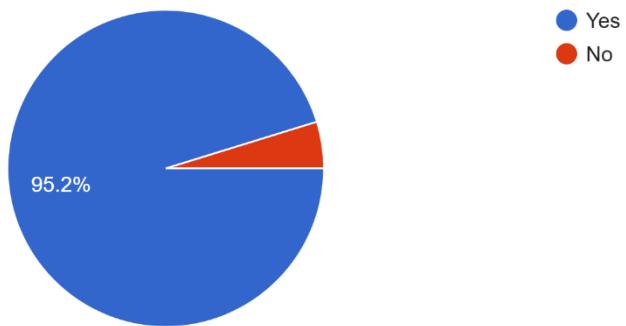
## Link to responses to questionnaire based on UI demoed in D2:

[https://docs.google.com/spreadsheets/d/1X0tNRLcHf6bpYmHG\\_sn1jpWhjfsDYWA8fOdzmY0pFNQ/edit?usp=sharing](https://docs.google.com/spreadsheets/d/1X0tNRLcHf6bpYmHG_sn1jpWhjfsDYWA8fOdzmY0pFNQ/edit?usp=sharing)

## Questionnaire Analytics and User Feedback

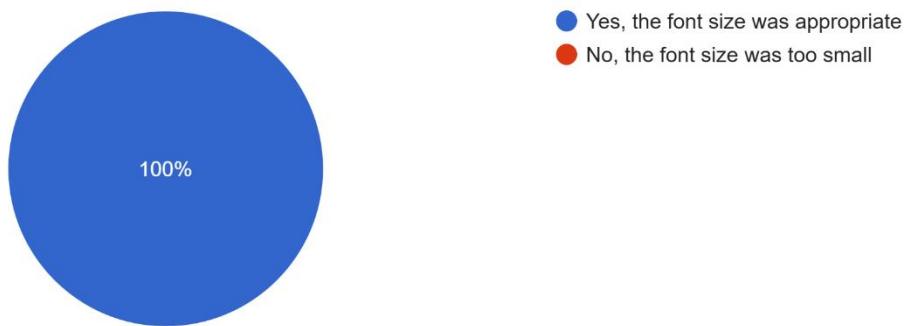
1. Was the profile page used for registration easily found from the landing page (App)?

21 responses



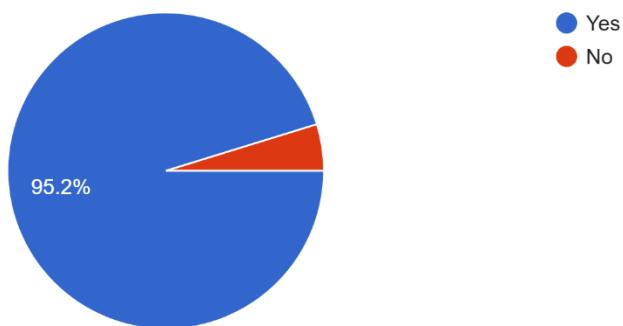
2. Was the page easily readable?

21 responses



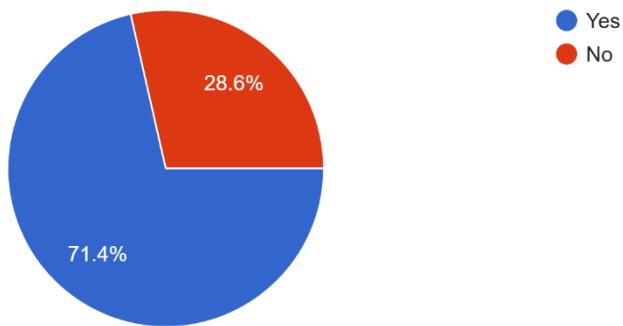
3. Were the required conditions for inputs (e.g., username length) intuitive to you?

21 responses



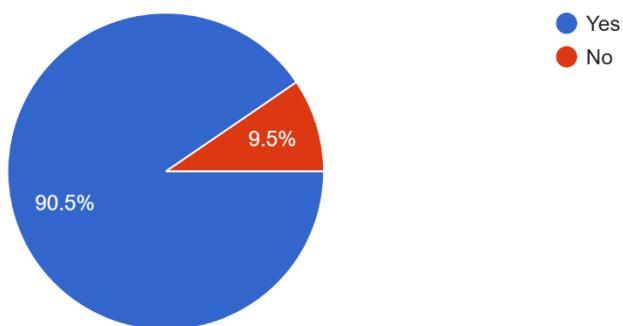
4. Would an additional note describing the criteria for the valid input conditions make your experience better?

21 responses



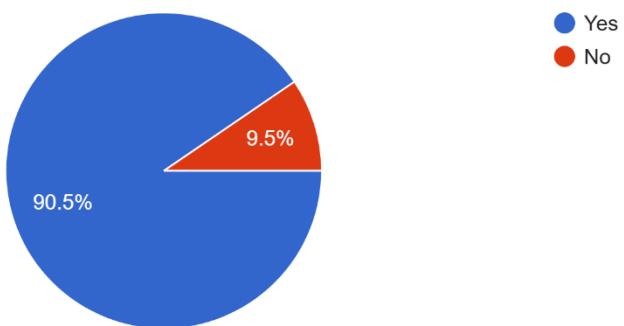
5. Would you (as a user) like to know why the details were collected?

21 responses



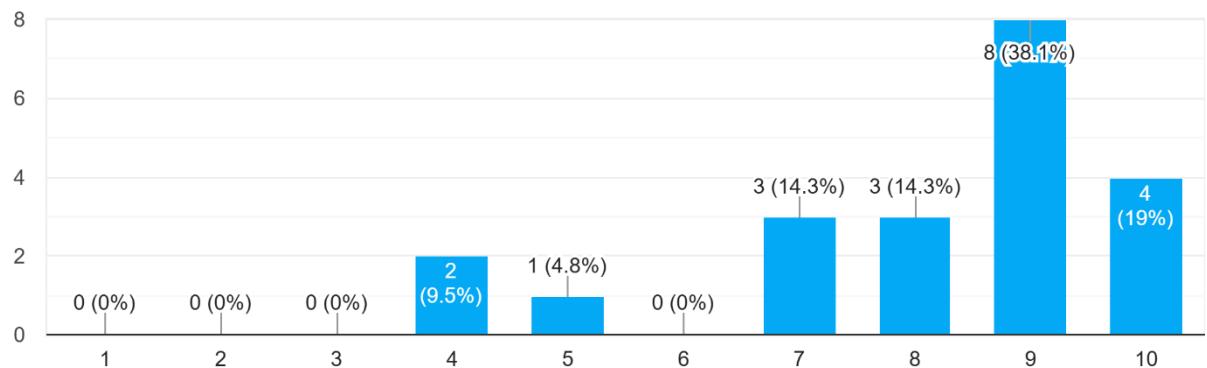
6. Would a description about the data usage improve user experience?

21 responses



7. On a scale of 1 – 10, what would you rate the user interface of the signup page?

21 responses



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8. What is your general feedback about the UI? Are there any problems with this UI? Did you find any bugs in the UI?

21 responses

Nah couldnt see any bugs but if i spammed save profile while changing names each time, at some point it stops saving it(or maybe it saves but the output message doesnt show the change in name).

Quite minimalist but seems functional

The UI is sleek and flows smoothly but the overall vibe is a bit too dark in my opinion. No bugs and no main problems altogether but would advise adding components or readjusting the UI such that the majority of the page isn't really empty.

In the username text box I got confused with 5+ to be meaning 5 characters an above. Idk if its a me thing. Other than that no problems

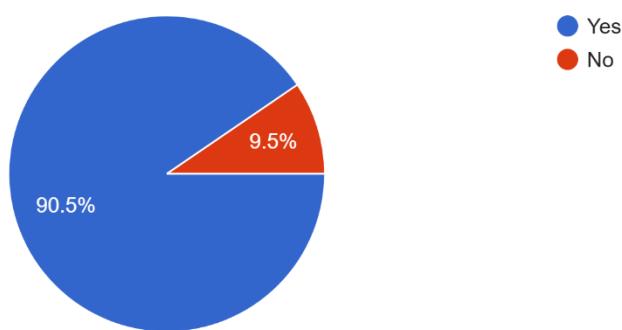
Worked well, was intuitive to use. I did not run into any bugs

The UI is nice and I haven't had any problems with the UI

add more styling

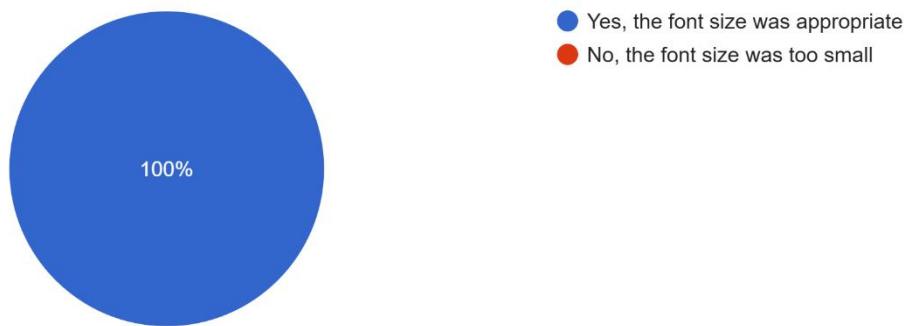
9. Was the preferences page used for set up easily found from the landing page (App)?

21 responses



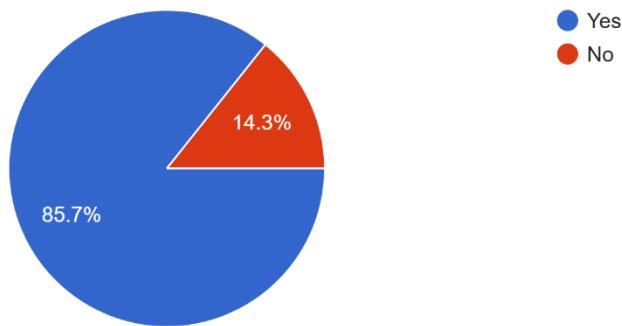
10. Was the page easily readable?

21 responses



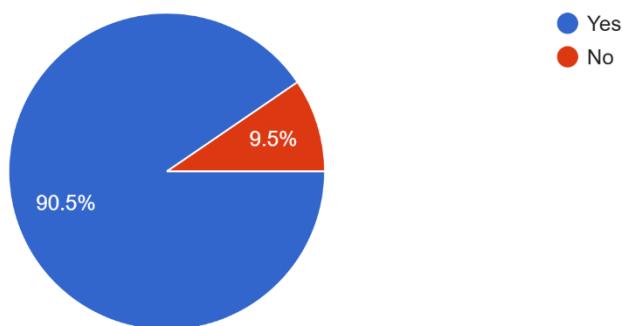
12. Would an additional note describing the criteria for the valid input conditions make your experience better?

21 responses



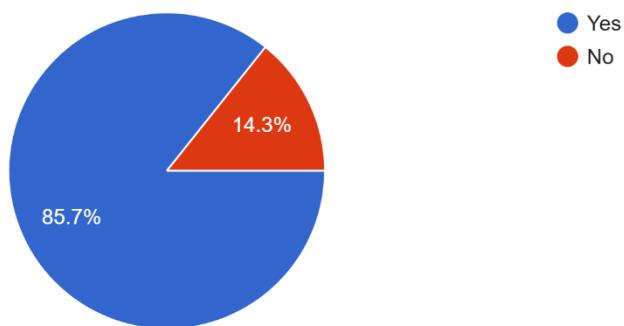
13. Would you (as a user) like to know how the collected inputs will be used?

21 responses



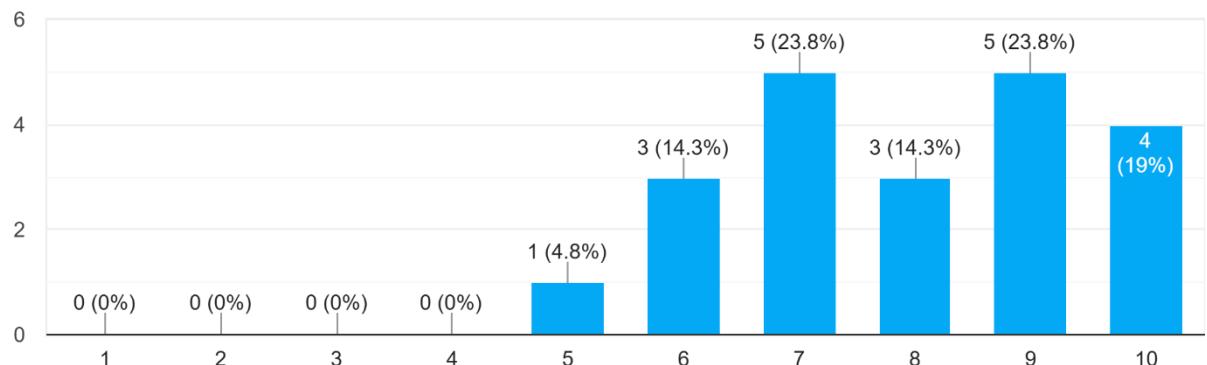
14. Would a description about the data usage improve user experience?

21 responses



15. On a scale of 1 – 10, what would you rate the user interface of the preferences page?

21 responses



16. What is your general feedback about the UI? Are there any problems with this UI? Did you find any bugs in the UI?

21 responses

- When inputting the skill the text showed up till 3 only so I assumed that only 3 were required as a minimum before getting the input minimum 5 prompt.
- Also the "Enter the minimum salary in k (1000)" i dont understand what this means since the plus button increments the number by 100 but i thought i should input in the 1000s. I got confused with this also.
- i was able to enter the number '1' in this text box and the preference got saved.
- In the skills textbox i was able to put "python" 5 times to fulfil the minimum 5 requirement. I was able to put 4 commas and pass the requirement.
- This would also lead to being able to only put 1 skill with 4 commas to pass the requirement.
- I was able to use numbers also as part of the skills (4 numbers was enough and 5 also worked)

Was intuitive to use, I didn't run into any bugs while setting my preferences

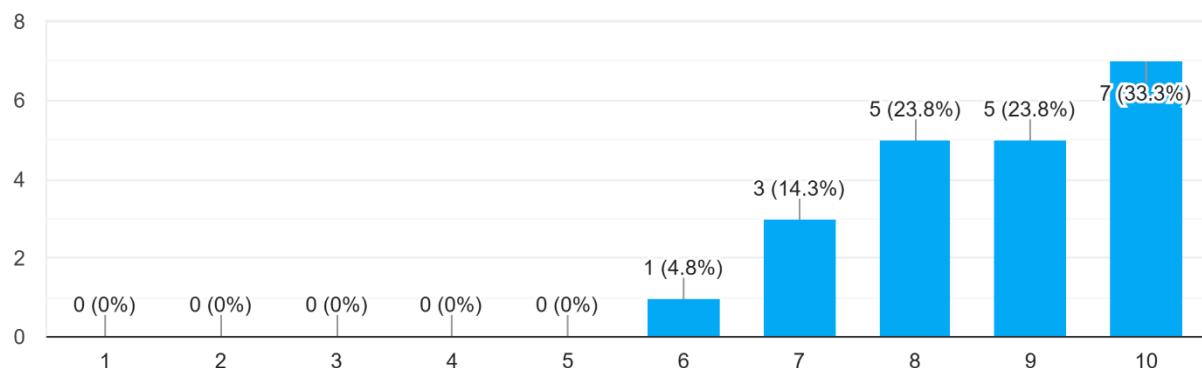
It's nice. No bugs

na

There should be examples to show what can be inputted as skills.

17. On a scale of 1-10, how easy was the whole process of searching for a job and viewing the listings?

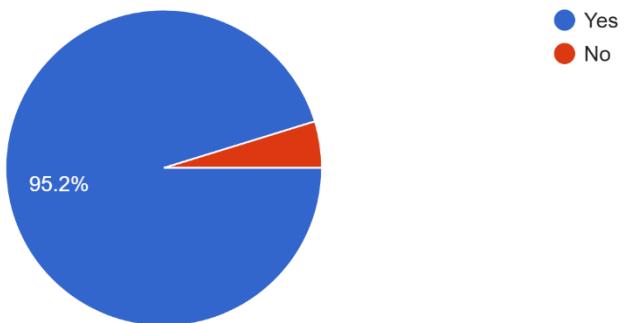
21 responses



C

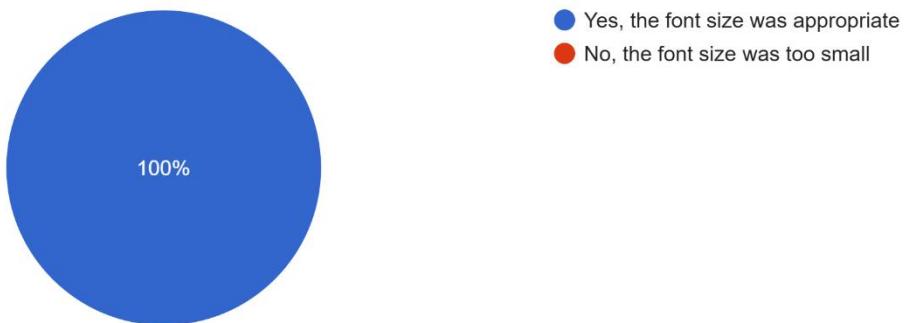
18. Was the dashboard page used to view the matched job listings easily found from the landing page (App)?

21 responses



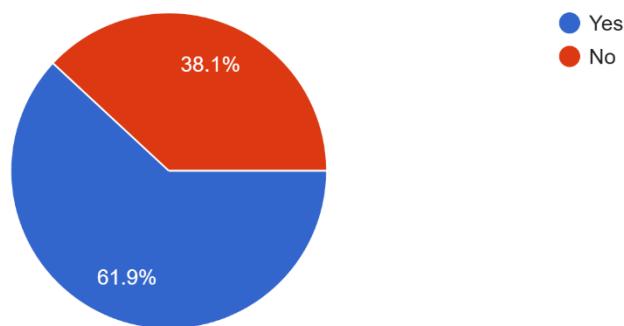
19. Was the page easily readable?

21 responses



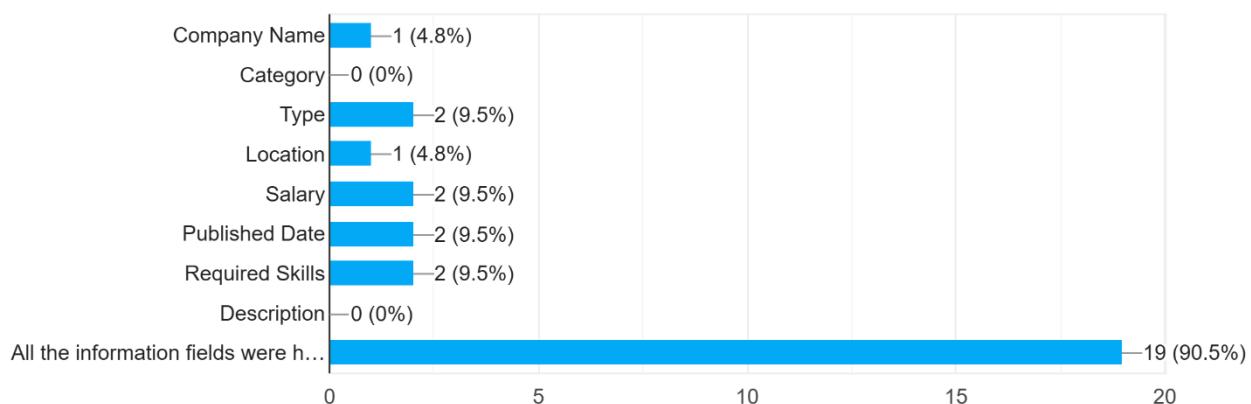
21. Would you (as a user) like to know how the job engine matches the job to your profile?

21 responses



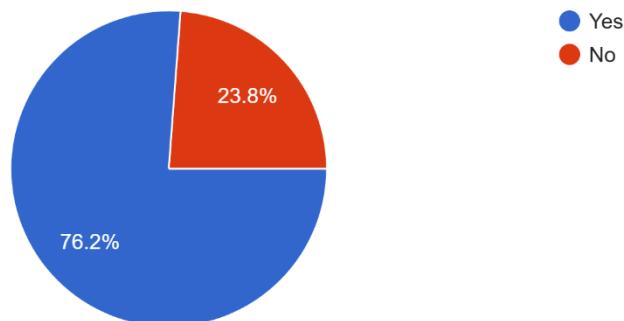
20. Of all the Job Listing information displayed, did you feel that certain attributes or pieces of information were useless to you as a user / not required? (Select all that apply)

21 responses



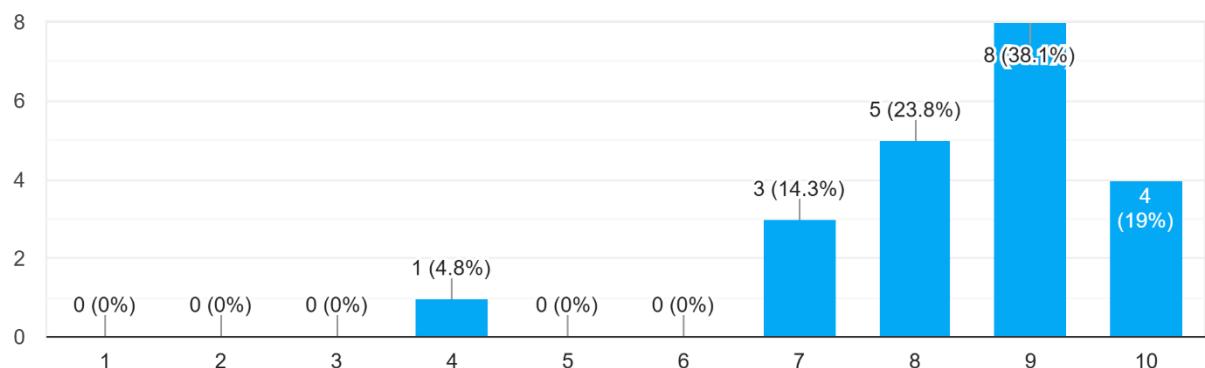
22. Would a description about the job matching logic improve user experience?

21 responses

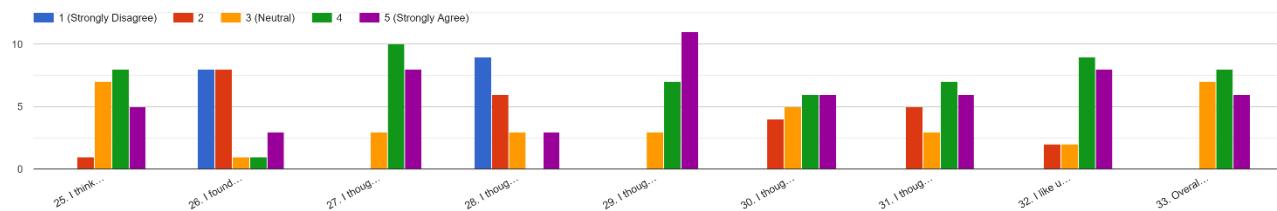


23. On a scale of 1 – 10, what would you rate the user interface of the dashboard page?

21 responses



Overall Rating Job Matcher: Rate the overall User Experience from 1 to 5 (1= Strongly disagree, 5=Strongly Agree)



## Analysis Summary:

Overall, the UI fared well in the usability testing feedback. Most users were happy with the design. Certain input fields could have used hints about the criteria for an input to be considered valid. A data usage policy notice would have significantly improved the user experience of many individuals. Some functional errors were also pointed out by individual during testing which hinted vulnerabilities in input validation logic.

## Link to Project:

[https://git.infotech.monash.edu/fit2107UG/2025s2/stha0083/-/tree/main/H3-UsabilityTesting?ref\\_type=heads](https://git.infotech.monash.edu/fit2107UG/2025s2/stha0083/-/tree/main/H3-UsabilityTesting?ref_type=heads)

## UI:

[https://git.infotech.monash.edu/fit2107UG/2025s2/stha0083/-/tree/main/H3-UsabilityTesting/pages?ref\\_type=heads](https://git.infotech.monash.edu/fit2107UG/2025s2/stha0083/-/tree/main/H3-UsabilityTesting/pages?ref_type=heads)

## Changes:

Most of the users also responded that the requirements for an input to be considered valid, if listed explicitly, would improve the user experience. Hence, the signup page and the preferences page now have a note about the criteria used for validating the user inputs

```
1_<_profile.py 1, M
H3-UsabilityTesting > pages > 1_<_profile.py > ...
22     st.write("this data will be used to support upcoming features that can alert the user as soon as ")
23     st.write("a certain number of newly posted jobs are matched, to allow user to apply instantly")
24
25     # Instructions
26     st.write("Please fill up the details below to set up your profile start using the Job Matcher:")
27
28     data_manager = DataManager()
29
29     # Signup form
30     with st.form(key='profile_form'):
31
32         if data_manager.is_signed_in():
33             user_data = data_manager.get_user_data()
34
35             username = st.text_input(
36                 "Username with more than 5 characters",
37                 key='profile_username',
38                 placeholder="must have 5+ chars",
39                 value=user_data["user_name"])
40
41             email = st.text_input(
42                 "Please enter a valid Email ID",
43                 key='profile_email',
44                 placeholder="mail@domain.extension",
45                 value=user_data["user_email"])
46
47         else:
48             username = st.text_input(
49                 "Username with more than 5 characters",
50                 key='profile_username',
51                 placeholder="must have 5+ chars",
52                 value="")

PROBLEMS 1 OUTPUT DEBUG CONSOLE TERMINAL PORTS

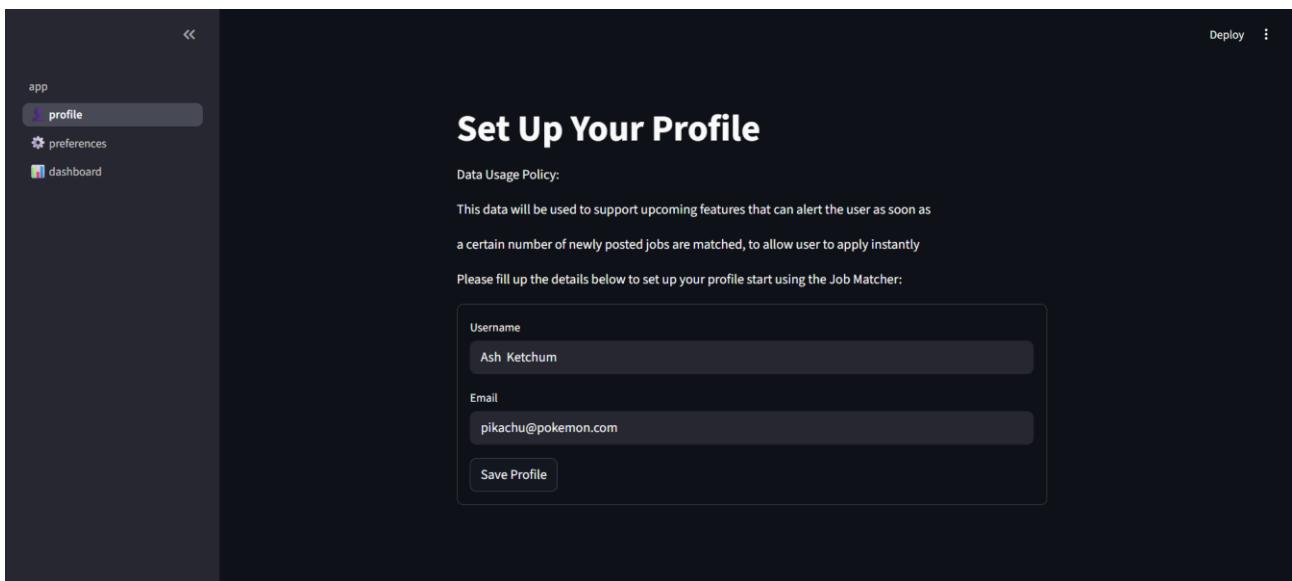
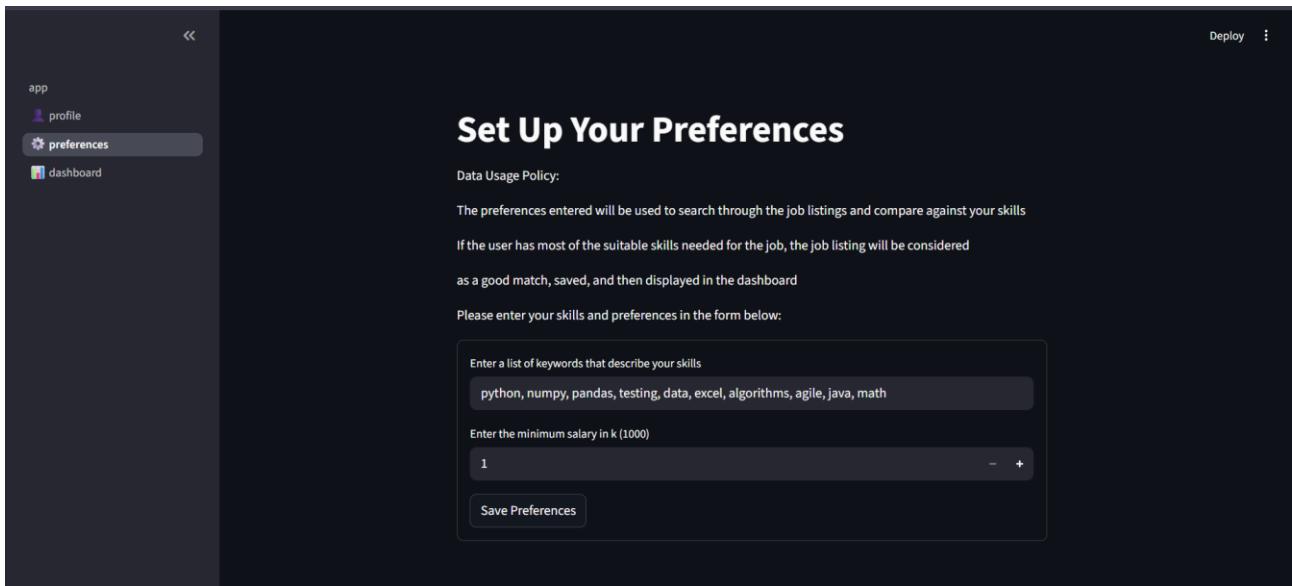
s\fit2107\sth0083\H3-UsabilityTesting\src\nlp_processor.py:117: UserWarning: [W008] Evaluating Token.similarity based on empty vectors.
token_score = token1.similarity(token2)
```



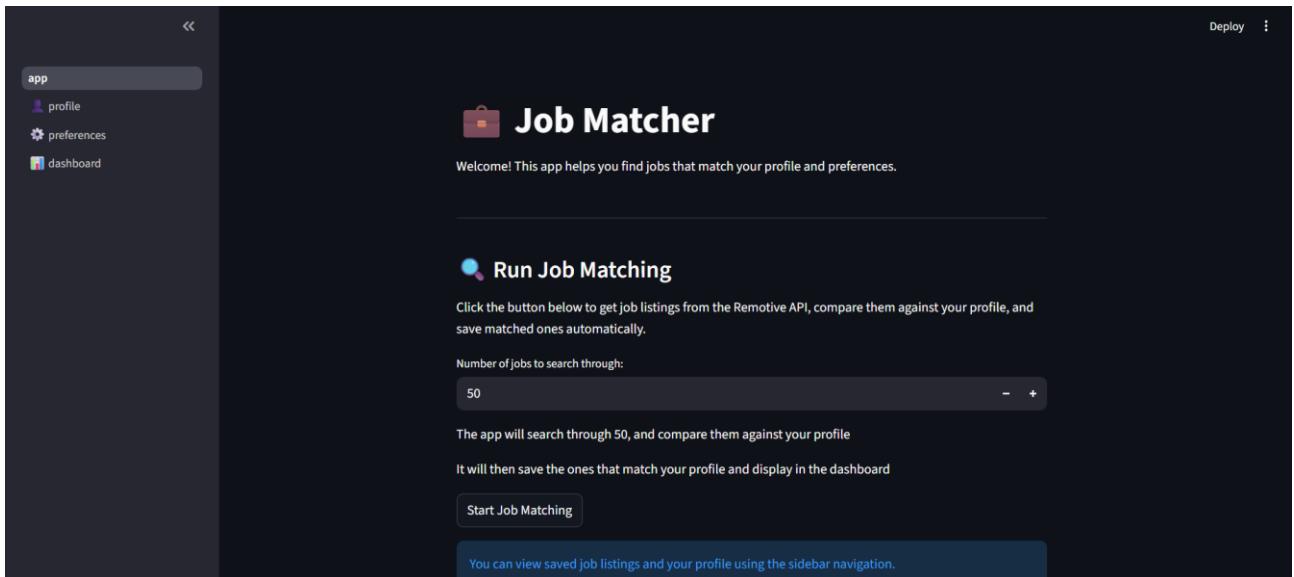
The image shows a screenshot of a web application titled "Job Matcher Dashboard". The dashboard has a dark theme with a sidebar on the left containing links for "app", "profile", "preferences", and "dashboard" (which is highlighted). The main content area features a large header with the title "Job Matcher Dashboard" and a sub-header "Find and manage your matched job opportunities". Below this, a message states that entered details, skills, and preferences are compared against a job listing feed from an API. A success message indicates suitable opportunities have been listed. The section "Your Job Listings" shows 160 results, with one item expanded to show details like company, category, status, and a "View Original Posting" button. The overall layout is clean and professional.

Most of the users felt that a data usage note would make the user experience better, hence a note about data collection is added to sign up page, skills preferences collection is added to preferences page and the app job search page has a note now that explains how the collected data was used to match the jobs for the applicant according to his/her skills and preferences

**Added a note about how the jobs are matched to applicant's profile**



Clarified that the job will search through the number of jobs and not necessarily find n jobs to display to avoid confusion



## Hosting:

### GitHub Public Repo:

To host the app online, I pushed my code to a github repository and.

Then I modified app architecture conversion from a single user app style of architecture to the website style software architecture which allows multiple users to use the app independently in their own browsers. It was done by changing the app storage from on device csv file to streamlit session storage which removed the app's long term memory capabilities, but allowed it to behave and function as a website.

<https://github.com/fit2107linkedinacc-sudo/JobMatcherD2>

### Hosting on Streamlit:

Then I hosted the app on Streamlit community cloud, setup the codebase to add the dependencies and server files to set up the deployment environment and understand the server logs post deployment to debug errors and successfully deploy the app on cloud to allow other users to use and test the app for usability anytime, anywhere without running it on terminal, and give feedback immediately. This is to encourage the users to test the app, use it, play around, and give genuine constructive feedback that can actually be used for making UI improvements.

Share ⚡ ⌂ ⌂

app  
profile  
preferences  
dashboard

## Set Up Your Preferences

Please enter your skills and preferences in the form below:

Enter a list of keywords that describe your skills  
skill-1, skill-2, skill-3,....

Enter the minimum salary in k (1000)  
0 - +

Save Preferences

```
150 |     # left column: filters
151 |     with st.sidebar.form(key="filters"):
152 |         st.header("Filters")
153 |         companies = ["(any)"] + sorted(
154 |             selected_company = st.selectbox(
155 |                 "Select company", companies)
156 |             types = ["(any)"] + sorted(li
/home/adminuser/venv/lib/python3.12/site-pa
in __getitem__
4110 |     if is_single_key:
4111 |         if self.columns.nlevels
4112 |             | return self._getitem_
4113 |         indexer = self.columns.f
4114 |         if is_integer(indexer):
4115 |             | indexer = [indexer]
4116 |         else:
4117 |             | except ValueError as err:
4118 |                 | raise KeyError(key)
4119 |             | if isinstance(key, Hashable):
4120 |                 | raise KeyError(key)
4121 |             | self._check_indexing_error(k
4122 |             | raise KeyError(key)
4123 |
4124 |     warnings.warn(f"en_core_web_md not availab
main   fi2107linkedinacc-sudo/jobmatcherd2... ⌂ >
```

jobmatcherd2-1my9ftbv6eczsek67jmzi.streamlit.app

Share ⚡ ⌂ ⌂ Action required ⌂

app  
profile  
preferences  
dashboard

## Job Matcher

Welcome! This app helps you find jobs that match your profile and preferences.

### Run Job Matching

Click the button below to fetch job listings from the Remotive API, match them against your profile, and save suitable ones automatically.

Number of jobs to fetch:  
50 - +

Start Job Matching

You can view saved job listings and your profile using the sidebar navigation.

◀ Manage app

The screenshot shows the Streamlit interface for the 'Job Matcher' application. The sidebar on the left has options: 'app', 'profile', 'preferences', and 'dashboard'. The main area features a title 'Job Matcher' with a brief description: 'Welcome! This app helps you find jobs that match your profile and preferences.' Below this is a section titled 'Run Job Matching' with a button to start matching. A message box indicates 'Job search complete! Saved 50 listings (if matched)'. At the bottom, a note says 'You can view saved job listings and your profile using the sidebar navigation.'

This screenshot shows a detailed view of a job listing. The sidebar still has the 'dashboard' selected. The main content displays a job for 'Front-End Developer at team.blue Global' and another for 'Junior Data Scientist at buyVerde'. The 'Junior Data Scientist' listing is expanded. It includes fields like 'Company: buyVerde', 'Category: Data Analysis', 'Status: False', 'Job Type: full\_time', 'Location: USA', 'Salary: nan', and 'Published: 2025-10-24'. Below these details, there's a 'Required Skills' section listing 'python, sql' and a 'Description' section containing a detailed paragraph about the junior data scientist role.

## Response Analysis:

The screenshot shows a Google Sheets document titled "H3 Usability Testing Questionnaire Responses". The spreadsheet has a header row with columns A through G. Column A contains response numbers (1 to 22), column B contains timestamps, column C contains email addresses, and columns D through G contain survey results for specific questions. The questions are: 1. Was the profile page used for registration? 2. Was the page easily readable? 3. Were the required conditions for inputs (e.g., font size, contrast) appropriate? 4. Would an additional note describing the requirements be helpful? Most responses are "Yes" or "No".

A1	B	C	D	E	F	G
Form Responses						
1	Timestamp	Email address	Action 1: Registration Profile Page	1. Was the profile page used for registration?	2. Was the page easily readable?	3. Were the required conditions for inputs (e.g., font size, contrast) appropriate?
10	02/11/2025 12:28:46	alo0017@student.monash.edu	Yes	Yes, the font size was appropriate	Yes	Yes
11	02/11/2025 12:30:04	akg2137@gmail.com	Yes	Yes, the font size was appropriate	Yes	Yes
12	02/11/2025 12:30:44	jije0001@student.monash.edu	Yes	Yes, the font size was appropriate	Yes	Yes
13	02/11/2025 12:37:37	sumalrhejib@gmail.com	Yes	Yes, the font size was appropriate	Yes	Yes
14	02/11/2025 12:39:42	psal0010@student.monash.edu	Yes	Yes, the font size was appropriate	Yes	Yes
15	02/11/2025 12:49:08	frederico.matthew28@g	Yes	Yes, the font size was appropriate	Yes	Yes
16	02/11/2025 12:52:03	wvor0001@student.monash.edu	I did not get taken to it I was direct to a	No	Yes, the font size was appropriate	Yes
17	02/11/2025 13:03:44	dsub0009@student.monash.edu	Yes	Yes, the font size was appropriate	Yes	Yes
18	02/11/2025 13:23:42	arrazy@gmail.com	Yes	Yes, the font size was appropriate	Yes	Yes
19	02/11/2025 13:27:09	ablaish.sasidharma@gn	Yes	Yes, the font size was appropriate	No	Yes
20	02/11/2025 16:38:59	ramizirfan006@gmail.cc	Yes	Yes, the font size was appropriate	Yes	No
21	03/11/2025 03:26:35	kmoh0027@student.monash.edu	spenzr, kmoh0027@student.monash.edu	Yes	Yes, the font size was appropriate	Yes
22	03/11/2025 05:03:36	luk0001@student.monash.edu	Yes	Yes, the font size was appropriate	Yes	No

Then I used the responses to analyse and make improvements to the UI

[https://docs.google.com/forms/d/1jzGQU1zvdoohhIIF49IFdm66ZcNWSwBnC\\_QvOLFsv1c/edit?ts=690741c7](https://docs.google.com/forms/d/1jzGQU1zvdoohhIIF49IFdm66ZcNWSwBnC_QvOLFsv1c/edit?ts=690741c7)

[https://docs.google.com/spreadsheets/d/1X0tNRLcHf6bpYmHG\\_sn1jpWhjfsDYWA8fOdzmY0pFNQ/edit?usp=sharing](https://docs.google.com/spreadsheets/d/1X0tNRLcHf6bpYmHG_sn1jpWhjfsDYWA8fOdzmY0pFNQ/edit?usp=sharing)

The screenshot shows the Google Forms responses interface. It displays 23 responses. The "Summary" tab is selected, showing a list of 10 email addresses of the respondents. The interface includes tabs for "Responses" (23), "Questions", "Settings", and "View in Sheets".

23 responses		View in Sheets										
	Summary	Question	Individual									
Who has responded?												
<table><tr><td>Email</td></tr><tr><td>fsad0006@monash.student.edu</td></tr><tr><td>bpla0006@student.monash.edu</td></tr><tr><td>rsat0014@student.monash.edu</td></tr><tr><td>nche0097@student.monash.edu</td></tr><tr><td>aarishstudies@gmail.com</td></tr><tr><td>preamavasanagarajan@gmail.com</td></tr><tr><td>mami0025@student.monash.edu</td></tr><tr><td>teja0005@student.monash.edu</td></tr></table>				Email	fsad0006@monash.student.edu	bpla0006@student.monash.edu	rsat0014@student.monash.edu	nche0097@student.monash.edu	aarishstudies@gmail.com	preamavasanagarajan@gmail.com	mami0025@student.monash.edu	teja0005@student.monash.edu
Email												
fsad0006@monash.student.edu												
bpla0006@student.monash.edu												
rsat0014@student.monash.edu												
nche0097@student.monash.edu												
aarishstudies@gmail.com												
preamavasanagarajan@gmail.com												
mami0025@student.monash.edu												
teja0005@student.monash.edu												

## Reference:

<https://bubble.io/blog/usability-testing-questions/>

<https://www.rev.com/blog/usability-test-questions>