**Individual project case: Jobbie**

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Jobbie is a social platform with main purpose to find a job for a students and also exchange text-based messages of at most 100 characters. Below, the functionality is described for the profile page and the start page and also have some examples of how it might work. Perfect case scenario is to be able to accept jobs and the jobs having expiring date, price, location and details. This is optional at the moment and the functionality will be that you can message user for a job and discuss everything in chat. So the jobs will be something like posts, but in different tab.

**Profile page:**

Table

Description automatically generated with low confidence

|  |  |  |
| --- | --- | --- |
| Function | Description |  |
| Profile picture profile name | Profile picture and name of the user |  |
| Profile details | User details: description about the user, location – City, Country, website description is limited to 160 characters |  |
| Own posts | 10 most recent posts by this user |  |
| Followers | Other users following this user.  By clicking followers, a list of followers appears instead of jobs and posts table. |  |
| Following | Other users followed by this user.  After clicking one of the links in Following, information of the user is opened in new tab. |  |
| Jobs accepted | Other user can see the jobs that you have accepted and done.  By clicking jobs accepted in your jobs , a list of jobs appears. | Optional |
| Jobs published | Other user can see the jobs that you have published and done.  By clicking jobs accepted in your jobs , a list of jobs appears. | Optional |
| Stars | Users can add a stars to the job of another user. A user can give at most five stars and least 1 star to each job accepted. | Optional |

**Start page:**

Graphical user interface, application

Description automatically generated

Graphical user interface, application

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This personalized page appears after logging in and you can choose between jobs tab or posts tab. Optional to have a starting page with both combined and mixed.

|  |  |  |
| --- | --- | --- |
| Function | Description |  |
| Search | Search within all jobs available. Results will be shown in the timeline tab. |  |
| What’s happening? | Textbox to enter your post or job with a maximum of 140 characters. The job/post will be shown immediately under 'Your posts. |  |
| Timeline | Timeline of jobs published from the user and from other users. |  |
| @Mentions | Posts mentioning the user appear in this tab. It is possible to mention another user by adding @username in the post. |  |
| Following/ followers | After clicking on either the following or followers link, the profile page appears. |  |
| Trends | Clicking on one of the trends results in list of jobs in the timeline tab. These jobs are at most one week old and contain a hashtag followed by the selected trend. |  |
| Jobs available | After clicking on the jobs available window, all the available jobs are listed and you can accept the job by clicking it. |  |
| Logout | After clicking logout the profile page appears. It is then possible to login as a different user. |  |
| Login | After clicking login and providing credentials, the starting page appears filled with tweets and other information for the user that is logged in. |  |
| Register | After clicking register, the user provides name, location, bio up to 160 characters and profile picture. |  |

Registration:

Create a registration form for new users.

Graphical user interface

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Moderation:

Create a page for users with the role of moderator. Moderators can see a list of users and their roles. They can remove users who spread insulting posts or jobs or use swear words. In addition, moderators can change the role of other users to moderator.

Administration:

An administrator can add or remove accounts of other users and may change the roles of other users.

And this is the login form:

Graphical user interface, application

Description automatically generated

If you log in as guest, then you will able to see just the jobs and not the posts from the users. You can still accept a job, but then need to make an account.

Notes:

Everything should be divided into microservices.

Scalability?!...(issues)

Should use automated QA pipelines.

Unit testing.

API testing.

Integration testing.

Working with big data -> Trend is to include various tools and approaches for data processing -> manage multiple data streams.

* Parallel query
* Multiprocess support
* Clustering features

Distributed data?

Security – most critical concern when developing enterprise software.

it must be compatible, versionable, easy to access, and managed by authorized persons.

Microservice is an autonomous service that has 1 responsibility.

Microservices designed around a certain business-domain/ capability.

Focus is more on replacing a service than reusing the service.

Polyglot - f

More lightweight communication protocols.

Supports a more modular approach.

Offers flexibility and availability

Supports an event-driven approach.

Make sure to know the max Staleness of the data.

Distributed System – CAP theorem applies.

Graphical user interface, diagram

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