BeamCV

June 12th, 2022

Product Overview

BeamCV is a CV-building app to empower refugees to access the global job market. Please find a demo of our form <u>here</u>.

The Challenge

Barriers to Entry for Refugees in the Workforce

- Lack of understanding of the host country employment culture and job application procedures, including cultural nuances and etiquette of the UK.
- Racism and negative stereotyping. Cross-cultural misunderstandings can contribute to misplaced suspicion and hostility. Public and workplace perception that additional costs and admin will be required when hiring a refugee.
- **Significant gaps on the CV** due to the prolonged asylum process during which most refugees are unable to work.
- Lack of work experience in the host country which is often prerequisite for getting a job.
 Some refugees have qualifications that they cannot prove because they are unable to obtain duplicates of the necessary paperwork.
- Lack of references. Lack of access to networks which would strengthen employment prospects and knowledge of recruitment methods.
- Unrecognized educational and professional qualifications.

How will BeamCV help?

We will address the challenges outlined above through multiple avenues:

1. Automatic CV localisation and translation - you only have to enter your information once to gain access to a CV formatted and translated to a standard for any country you are in

- 2. Eliminating subconscious bias by anonymising CVs
- 3. Prevent career gaps from having a negative impact on employability by presenting work experience formatted as absolute years vs. a timeline
- 4. Ensuring our app is accessible to those with limited connectivity and low-end devices, or those who only have access to mobile devices
- 5. Reconnecting ex-colleagues to improve the probability of references and proof of work

The next steps for Beam CV would be to build a native messaging platform within the app, to allow employers to reach out to users directly.

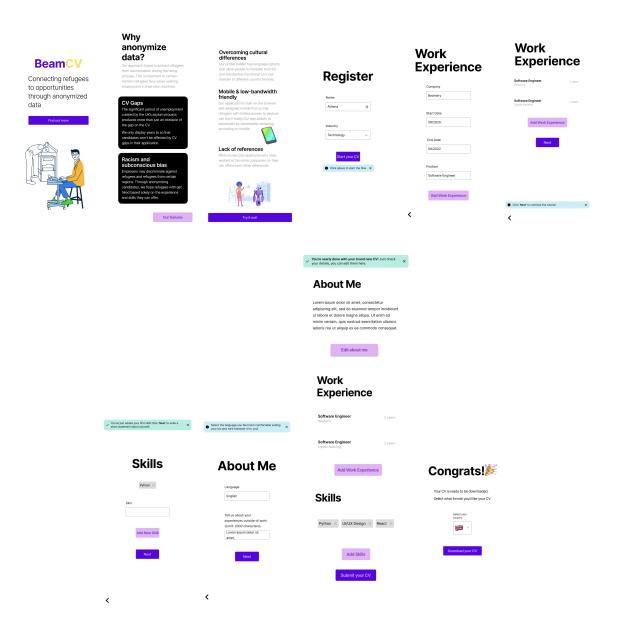
Business model

Our aim is for the app to be free for refugees, and funded by the employers themselves. Employers would pay a premium for access to the native messaging platform within the app, with the potential for a discount if they provide an Applicant Tracking System bypass. The ATS bypass would prevent refugee applicants from being rejected automatically due to missing "keywords" in their CV.

Technical specifications

We built BeamCV using a Django framework and a React frontend. Our MVP was to have a CV details form where we collect the data for a registered user and present them with a formatted CV.

Frontend



The onboarding flow treats each section step-by-step, so users can focus on each aspect of the CV individually. It also includes nudges through toast notifications to guide them through the journey of creating their first CV. They also provide transparency to inform users of how their inputs will be used, e.g. translation services or whether they will be anonymized.

Backend

Our MVP was to have two endpoints:

- A GET user details endpoint, that returns all information for a user, including their registration details and CV form details. This data will be stored in the frontend context and continuously updated as the user goes through the form journey.
 - Request:

```
{
  user_id: <userId>
}
```

- Response:

```
user_id: <userId>,
user_details: {
 name: <name>,
 phone_number: <phoneNumber>,
 email: <email>,
 date_of_birth: <dateOfBirth>,
 languages: {
   primary_language: <languageId>,
   \verb|secondary_languages: [ < languageId >, < languageId >, \dots ]|
},
work_experience: [
   company_id: <companyId>,
   company_name: <companyName>
   start_date: <startDate>,
   end_date: <endDate> (nullable),
   role_title: <roleTitle>
   details: {
     details_text: <details>,
     language_id: <languageId>
   } (nullable)
 }, ...
],
skills: [
 {
   skill_id: <skillId>,
   skill_name_by_language: [
        skill_display_name: <skillDisplayName>,
       language_id: <languageId>
     }, ...
   1
 }, ...
about_me: {
 about_me_text: <aboutMe>,
 language_id: <languageId>
```

- A POST endpoint to update user CV details collected in the form:
 - Request:

```
user_id: <userId>,
languages: {
 primary_language: <languageId>,
  secondary_languages: [<languageId>, <languageId>,...]
work_experience: [
 {
   company_id: <companyId>,
   start_date: <startDate>,
    end_date: <endDate> (nullable),
   role_title: <roleTitle>
   details: {
     details_text: <details>,
      language_id: <languageId>
   } (nullable)
 }, ...
skills: [<skillId>, <skillId>, ... ],
about_me: {
  about_me_text: <aboutMe>,
  language_id: <languageId>
}
```

- Response: 204 No Response

We also invite you to check out our **cvbuilder/models.py** file to see how we structured our database.

Security

Authentication

Refugees' are sharing very sensitive data, secure methods of authentication are key. To reduce the risk of compromisation, by default the app requires authentication through SSO.

Brute force protection

Users are locked out after 5 incorrect login attempts, to reduce the likelihood of compromised accounts.

Session management

Refugees may be using shared or public devices, so sessions time out after 2 hours.

To avoid complexity and reduce the risk of Broken Access Control (Number 1 of the OWASP top 10), we have two user levels, Admin (for internal development use) and user. The user can change all data relating only to themselves.

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