

MOTIVATION

- Tremendous increase in number of **Massive Open Online Courses** (MOOCs)
- How does a user find the right course?
- MOOC platforms offer general recommendations and are not focused on a particular **job role**

Objective: Create a system which recommends a customizable curriculum of courses from multiple MOOC providers based on the skills required for a specific job role

DATA

MOOC DATA

- **Udemy, Udacity and edX** APIs
- Requires developer affiliate approvals
- Obtained nearly **28000** courses

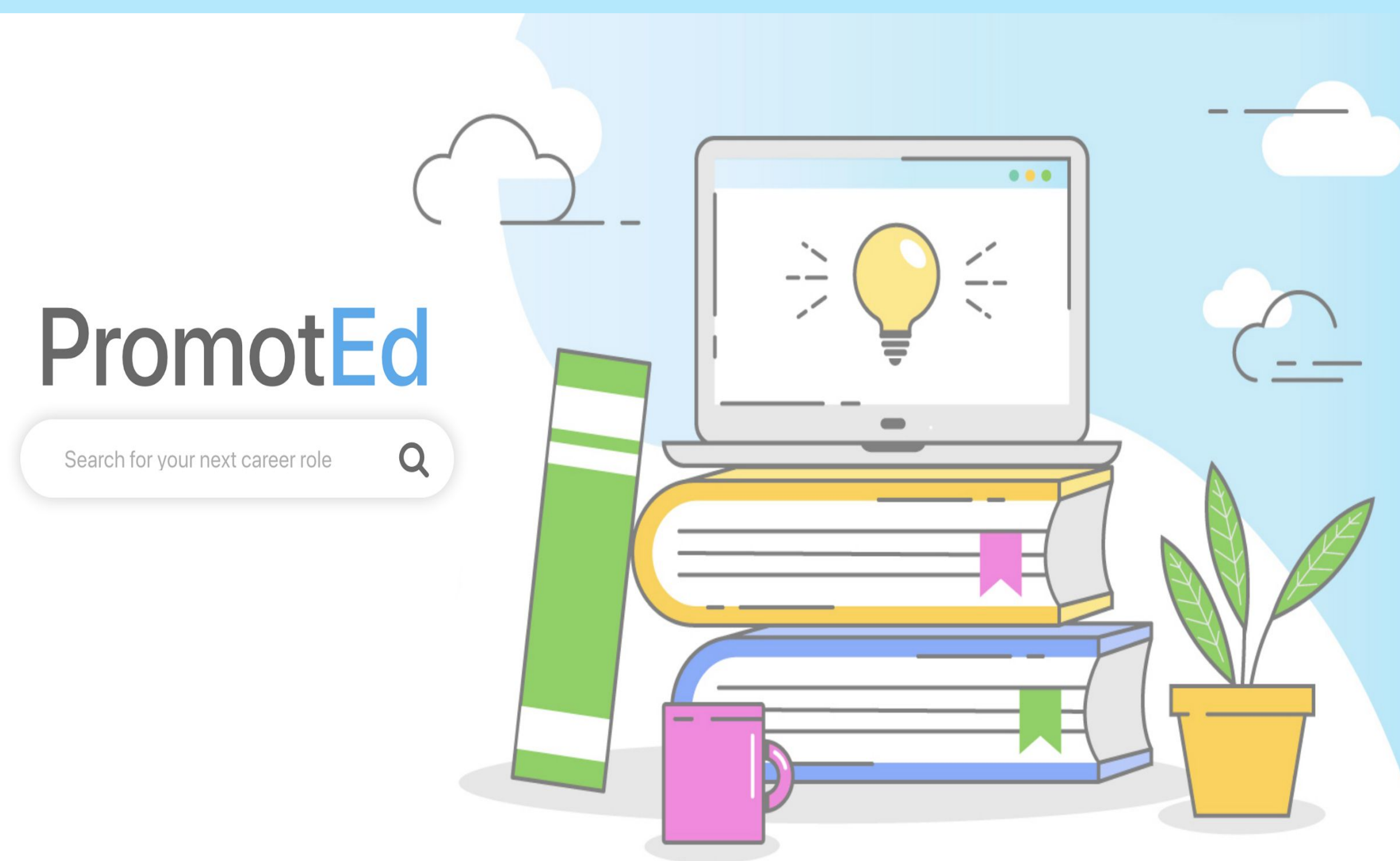
JOB DATA

Kaggle datasets used:

- US-based jobs from Dice.com
- US jobs from Monster.com
- **124 MB** of job data used to find role-specific keywords

APPROACH

- MOOC & job data collection using APIs and Kaggle
- Extract **keywords** corresponding to top skills from job descriptions using count-vectorization
- Use keywords to select relevant courses by using **content-based recommendation** and filtering courses from the most probable category
- Build **interactive platform** where users enter the job title and view a course curriculum
- **Customize the search result visualization** by filtering recommendations according to user constraints such as time commitment and budget



INNOVATION

- Aggregates courses from **multiple MOOC** providers
- **Job role focused** recommendations
- User preference filtering (skill level, cost, time commitment)

NEXT STEPS

- Learning path generation
- Progress/skill tracking
- Refine relevancy of course recommendations

EXPERIMENTS/RESULTS

- User surveys
 - PromotED user testing
 - Compute average user ratings for each category
 - **24** responses collected
- Consolidate negative and positive feedback to inform future steps

