UpSkillz - Find and Match the Right Course

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Motivation

With the abundance of online courses available, it can be challenging to find courses that align with one's interests and goals. UpSkillz simplifies the course selection process, providing high-quality personalized course recommendations.

Objective

To help individuals and institutions find and select courses that align with their interests, goals, and learning preferences, making the learning experience more effective, efficient, and enjoyable. Revenue will be generated through commission-based partnerships, advertising, and subscription fees.

Target Users

UpSkillz targets individuals and institutions who are looking to provide personalized course recommendations to their employees or students. Target users including students, professionals, employers, educational institutions, and training providers.
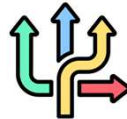
Approach

Personalized Recommendation

Incorporating user data into machine learning algorithms to provide more personalized course recommendations

Flexible Subscription Model

Depending on user's needs, they can opt for a premium tier subscription which provides ads free recommendations.

High Availability and Reliability

With our state-of-the-art cloud architecture, users will not have to worry about downtime and the app will always remain accessible to users.

Intelligent Search

Our search algorithm will only provide the most relevant courses to users.
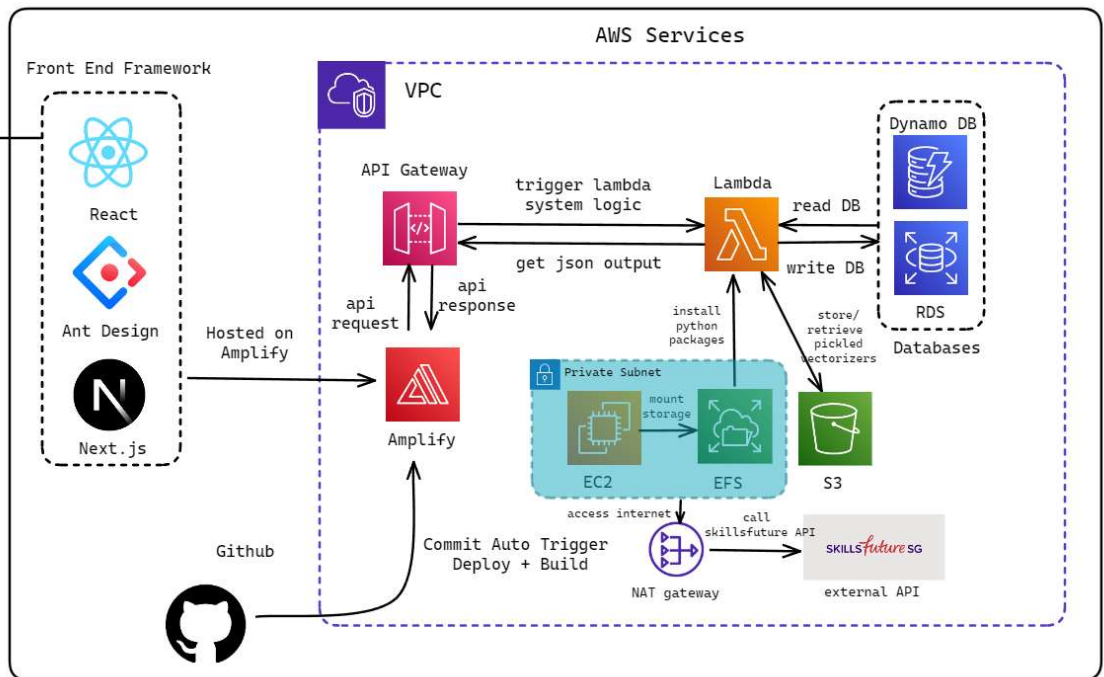
Implementation

Front-End:

Next.js Amplify Ant Design React

Next.js is used as our front-end framework. It used with **React** to provide the building blocks (fetch, routing etc.) to build our web application.

Ant Design is used as our UI library for composing and creating UI components.

Amplify is then used for hosting our static website. It is integrated with **GitHub** such that any push commits will auto trigger the build and deploy of our website

Back-End:

EFS S3 API Gateway EC2
RDS DynamoDB Lambda NAT Gateway

API Gateway is used to trigger the **Lambda** upon receiving request from front-end. It will return the response for front-end to process and display recommendation, search etc. **Lambda** will also read / write from DB, retrieve pickled vectorizers from **S3**.

NAT gateway is used for our lambda to call external API (e.g. Skills Future API).

RDS is used to store our post-processed recommendation data. **DynamoDB** is used to store our account, search data.

EC2 with **EFS** file system is used to store our python packages for our recommendation algorithm to use in **lambda**.

Revenue Model

The revenue model for Upskillz includes three pricing models: Commission-based partnership, advertising and subscription

Commission-based partnership

Commission-based partnerships will charge a 5% commission fee on the total value of any course transaction made through the app.

Advertising

Advertising revenue will be generated through a cost-per-click (CPC) or cost-per-impression (CPM) model, with advertisers being charged $0.50 per click or $1.00 per thousand impressions.

Subscription Fee

The subscription fees will be a tiered subscription model, with a affordable basic plan and premium plan at higher costs, offering more features and access to recommended courses.
- $5 per month for basic plan
- $20 per month for premium plan