

# Blackfoot: E - Learning App



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## MOTIVATION

- increase accessibility and participation in language education.
- protect and revitalize cultural heritage.

## OVERVIEW

**Blackfoot** is a dynamic and engaging **online platform** for learning language and culture, aiming to preserve and digitally revitalize this indigenous language.

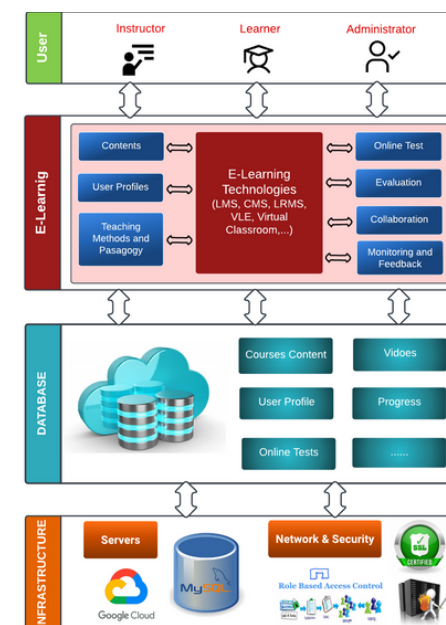
- Teachers can create content and publish it, and students can easily follow it.
- A powerful administrator backend maintains content and user security, and website management.

## TECHNOLOGY

- Language / Frameworks: JavaScript, HTML & CSS, React, Node.js
- Tools: AWS(EC2 & S3), PostgreSQL



## ACCOMPLISHMENTS



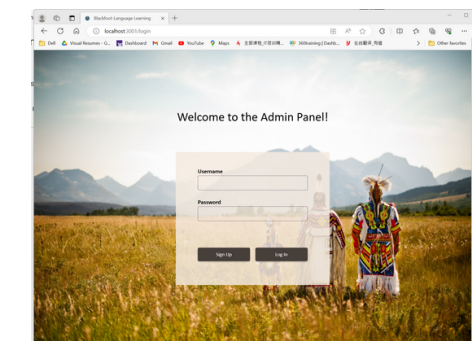
The system architecture supports a **online E-learning platform**, designed to support a minimum of 1000 concurrent users during peak usage.

- **User-Friendly Interface:** Focuses on ease of use, ensuring a smooth and intuitive experience for all users.
- **Robustness:** Ensures stable performance and minimal downtime.
- **Scalability:** Designed for high scalability.

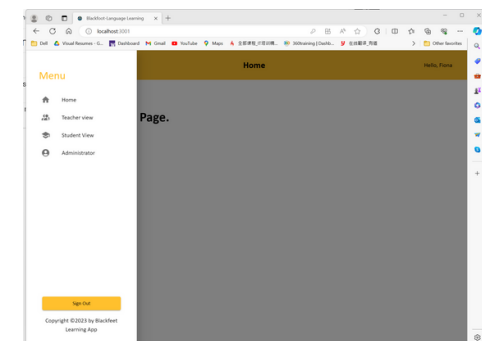
### Administrator Panel completed

- **Frontend:** Developed with React for its modularity and flexibility.
- **Backend:** Powered by Node.js for its performance and extensive toolset.
- **Database:** PostgreSQL selected for its stability and support for diverse data types, offering scalability.
- **AWS Hosting:** Chosen for user-friendliness, cost-effectiveness, and scalability; utilizes Amazon RDS for easy management and scaling of PostgreSQL in the cloud.

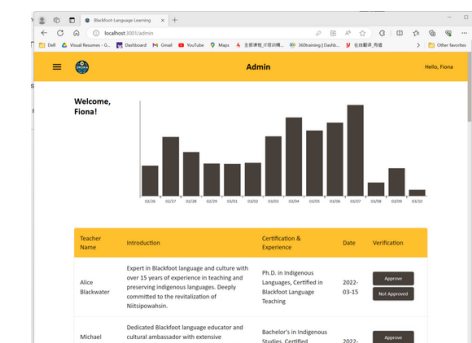
## RESULT



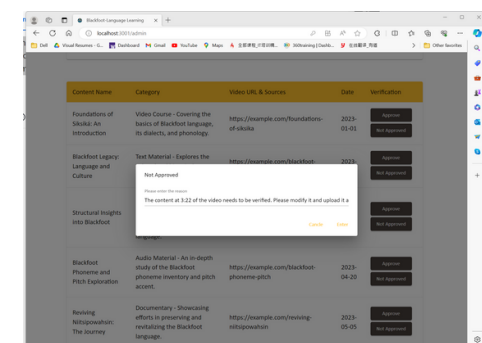
sign-in page with Blackfoot tribal background image



A sidebar with "teacher" and "student" views



Admin Page



buttons to facilitate administrators' verification

## ACKNOWLEDGEMENT

Truly thankful for the opportunity to work on this project, which has significantly enhanced my skills in integrating advanced technologies like React, Node.js, Postgres and AWS. I'd like to extend my heartfelt thanks to my mentor, Min Chen, for her invaluable guidance and to my team members for their collaborative spirit and support throughout this journey.