

The Lesson Summary Generator

Project Summary

The Lesson Summary Generator (LSG) is a tool for a user (likely an instructor, teacher, or a tutor) to create a list of students and list of concepts the instructor will cover. The user can then use a form to enter a student's performance on homework, the concepts covered during the lesson, and assignments for the next lesson. Using that form, LSG will create summaries using OpenAI. Ultimately, these summaries can then be modified or edited for clarity or length as needed.

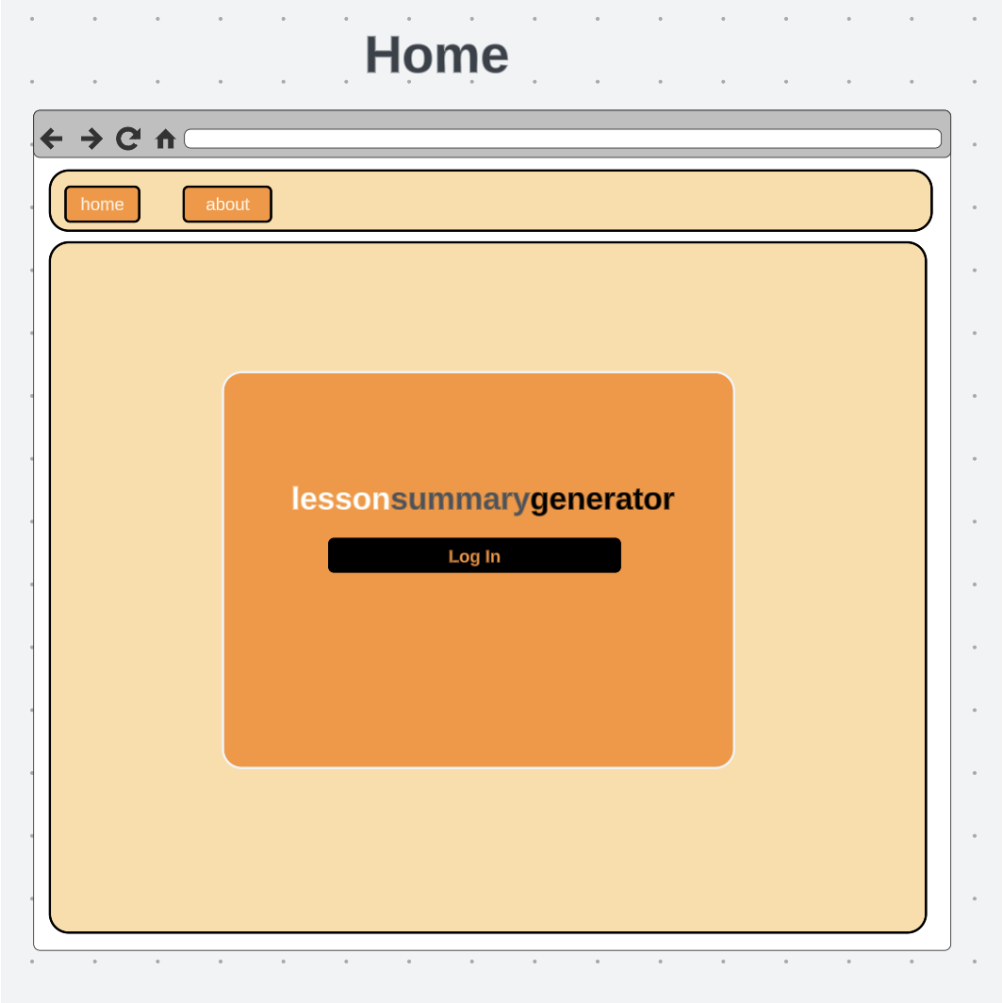
Technologies Used

1. Django
2. OpenAI

Project Planning Overview

[Link to Trello Board](#)

Wireframes:



Concept Index



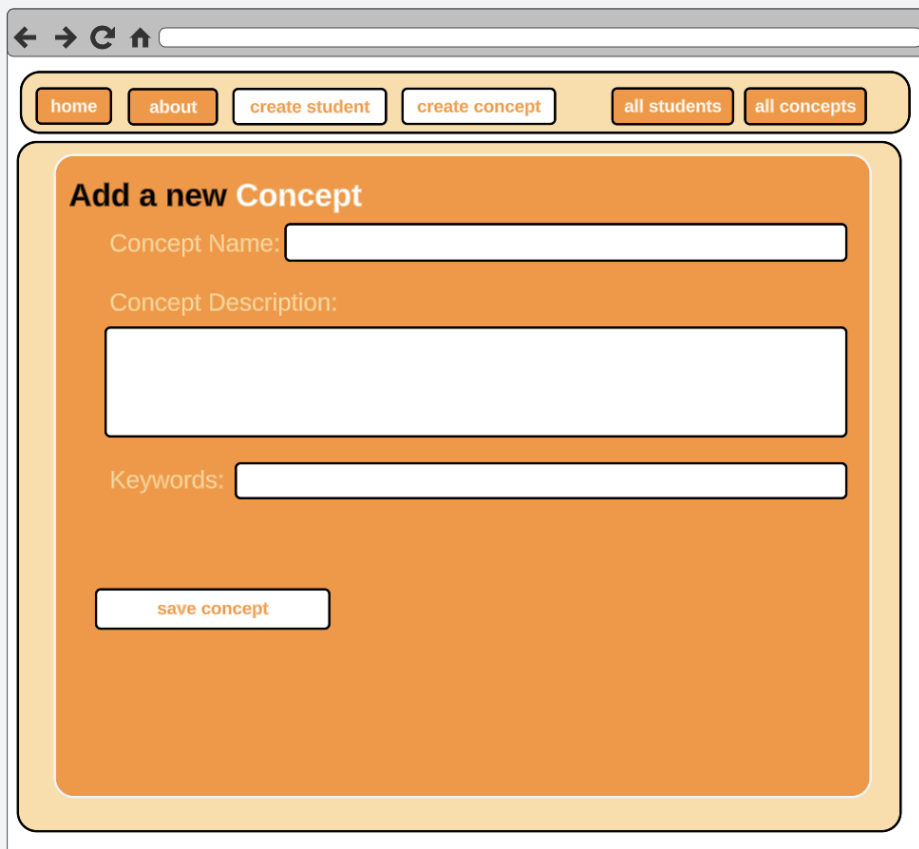
A screenshot of a web browser displaying the 'Concept Index' page. The browser's address bar is empty. The page has a navigation bar with six buttons: 'home', 'about', 'create student', 'create concept', 'all students', and 'all concepts'. The main content area has an orange background and is titled 'Joshua Smith's Concepts'. Below the title, a list of programming languages is displayed: HTML, CSS, Javascript, Python, C++, and Java.

home about create student create concept all students all concepts

Joshua Smith's Concepts

- HTML
- CSS
- Javascript
- Python
- C++
- Java

Concept Form Page



A screenshot of a web browser displaying the 'Concept Form Page'. The browser's address bar is empty. The page has a navigation bar with six buttons: 'home', 'about', 'create student', 'create concept', 'all students', and 'all concepts'. The main content area has an orange background and is titled 'Add a new Concept'. Below the title, there are three input fields: 'Concept Name:', 'Concept Description:', and 'Keywords:'. A 'save concept' button is located at the bottom of the form.

home about create student create concept all students all concepts

Add a new Concept

Concept Name:

Concept Description:

Keywords:

save concept

Student Form Page

[←](#) [→](#) [↺](#) [↑](#)

[home](#) [about](#) [create student](#) [create concept](#) [all students](#) [all concepts](#)

Add a new Student

First Name:

Last Name:

Graduation Year:

Program Type:

[save details](#)

Student/Index

[←](#) [→](#) [↺](#) [↑](#)

[home](#) [about](#) [create student](#) [create concept](#) [all students](#) [all concepts](#)

Joshua Smith's Students

- Federico Rossi
- Lauren Mendoza
- Ellen Park
- James Redden
- Joshua Hsu
- Rob Hayden
- William Hu
- Humayan Tariq Mughal
- Louis Pino
- Laurie Himmel
- Lily Smith
- Mikal Nieginski

Lesson Logs

- you created a lesson note for **Federico** on **9/23/2019**
- you created a lesson note for **Ellen** on **9/23/2019**
- you created a lesson note for **James** on **9/23/2019**
- you created a lesson note for **Rob** on **9/23/2019**
- you created a lesson note for **William** on **9/23/2019**
- you created a lesson note for **Laurie** on **9/23/2019**
- you created a lesson note for **Lilly** on **9/23/2019**
- you created a lesson note for **Reginald** on **9/23/2019**
- you created a lesson note for **Federico** on **9/23/2019**

Student Detail Page

←

→

↺

⬆

home

about

create student

create concept

all students

all concepts

Federico Rossi

edit student details

delete student

Program Type:

Graduation Year:

Last 3 Lesson Summaries

Enter a new lesson note

View more...

View more...

View more...

See the next 3

Lesson Note/ Lesson Summary Page

← → ↻ 🏠

homeaboutcreate studentcreate conceptall studentsall concepts

Federico Rossi

Lesson Summary

save summary

edit summary

delete summary

Lesson Date:
How much of the homework did the student complete?
How well did the student perform?
Any other notes about the homework?
What lessons/concept did you cover today?
Any specific feedback you want to offer?
What is the homework for the next session?
When is the next lesson?
Any private notes?

save notes

edit notes

generate summary

[Link to Wireframes](#)

Relevant Links:

[Link to GitHub Repo](#)

[Link to OpenAI API Documentation](#)

Models

Instructor	Type Of Data
instructor_id	id
first_name	CharField
last_name	CharField

Student	Type of Data
student_id	id
last_name	CharField
graduation_year	DateField
program_type	TextField

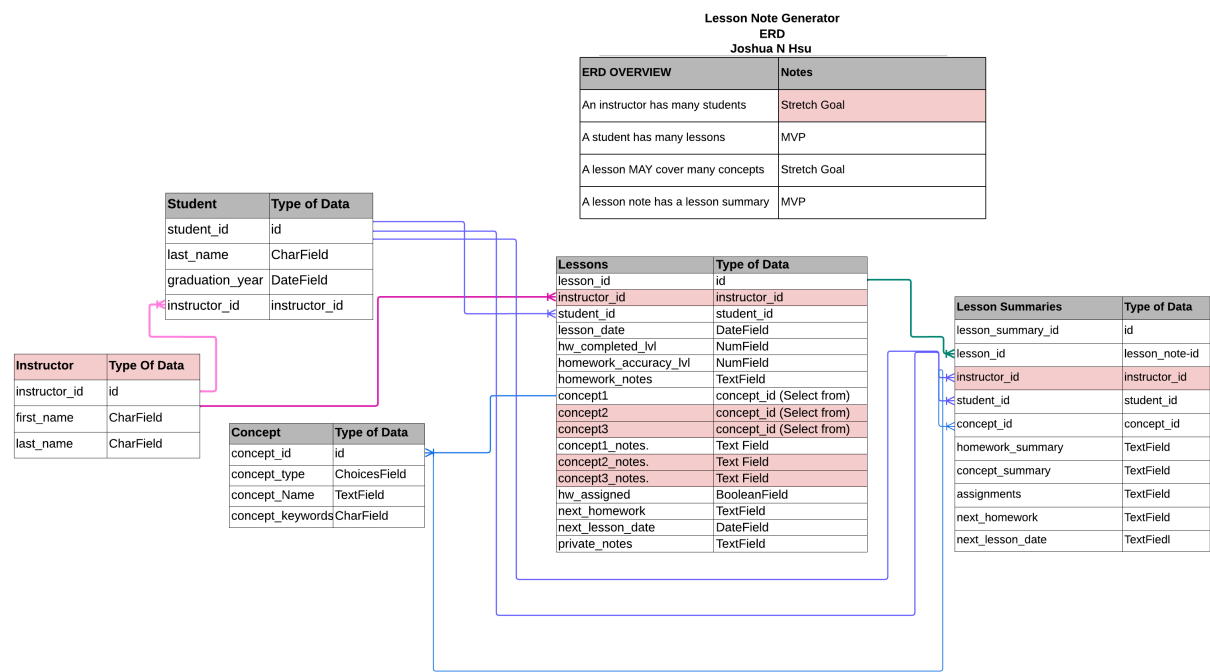
Concept	Type of Data
concept_id	id
concept_name	CharField
concept_description	TextField

Lessons	Type of Data
lesson_id	id
instructor_id	instructor_id
student_id	student_id
lesson_date	DateField
hw_completed_lvl	NumField
homework_accuracy_lvl	NumField
homework_notes	TextField
concept1	concept_id (Select from)
concept2	concept_id (Select from)
concept3	concept_id (Select from)
concept1_notes.	Text Field
concept2_notes.	Text Field
concept3_notes.	Text Field
hw_assigned	BooleanField

Lessons	Type of Data
next_homework	TextField
next_lesson_date	DateField

Lesson Summaries	Type of Data
lesson_summary_id	id
lesson_id	lesson_note-id
instructor_id	instructor_id
student_id	student_id
concept_id	concept_id
homework_summary	TextField
concept_summary	TextField
assignments	TextField
next_homework	TextField
next_lesson_date	TextField

Basic ERD:



Routes

Lesson Summary Generator Routes

User Stories:

There are four layers to the stories: concepts, students, lesson notes, and lesson summaries.

(A) Concepts

- As a user, I want to be able to add a concept (alongside a description of that concept) to a list that I will later reference in my lesson notes.
- As a user, I want to be able to edit the title or description of that concept or delete the concept (and any associated content).

(B) Students

- As a user(AAU), I want to be able to add a student to my student list
- AAU, I want to edit the students details.
- AAU, I want to view a list of all my students.
- AAU, I want to view the details of a specific student and any lesson summaries associated with that student.

(C) Lesson Notes

- AAU, I want to view a form where I can quickly summarize my impressions of a lesson, including a student's performance on homework, the concepts covered during the lesson, and the student's assignments for the next lesson.
- AAU, I want to be able to save and edit that form.

(D) Lesson Summaries

- AAU, I want to be able to use the saved note to generate a three-paragraph summary, highlighting the student's homework performance, the concepts covered, and assignments.
- AAU, I want to save that content to the student's page.
- AAU, I want to be able to edit and update that summary.
- AAU, I want to be able to delete both the lesson summary and corresponding lesson note.

Stretch Goals:

1. OAuth that allows for multiple instructors
2. Adding Subtopics with their own distinct keywords for Concepts
3. Refactor template components into React
4. Adding grammar, tone and style buttons that can prompt the LSG to revise summaries based on the preferences of the instructor and needs of the student's families
5. Adding calendar widgets to date settings

Links to documentation for Stretch Goals:

1. [OAuth](#)
2. [Calendar Widgets](#)