DevBootcamp:
E-Learning Online Course Website

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Project Guide
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1.Introdution

After this covid period E-Learning has become an important part of our education system, So we introduce DevBootCamp which is an online course provider for Aspiring Software developers.

DevBootCamp offers online courses, certifications, and degrees in various Tech Fields.

The Problem we identify is, Users need a website to track their work and create a routine that can maximize their workout.

The Solution we proposed is,The user will be able to track work for a particular day with the ability to add exercises. Each exercise can have a corresponding detail of sets and information about how to do the corresponding exercise

2. Objectives

1. To empower people to learn new and market trending tech fields using new tech courses.
2. To gamify the learning process.
3. To make best use of user's time.
4. To add new skills in user's arsenal.
5. Fast static files serving with Ngnix webserver
6. To track users learning progress.
7. To study any time you want and you an study with whomever you want.
8. To give you the flexibility to spend time with work ,family ,friends , significant other or any other activity you like.

3. Scope

1. Can be used in Education field to empover at-place learning.

2. Can be used in Company's and industries to tech workers their latest tech, with no human error.

3. Can be used by individual teacher, to spread its reach in global market.

4. Can be used to see improvement through quiz after completion of sections.

4. Literature Survey

Title	Year	Technology Stack	Advantage	Limitation	URL
Online Teaching and Learning in Higher Education during the Coronavirus Pandemic	2020	nginx, mysql , nodejs, django, aws ec 2 , react, bootstrap, graphql	1. Flexibility 2. Time Management Skill Development 3. Wider Range of Courses and Programs	Sample was non-probabilistic and the research was conducted only on two Romanian universities. Thus, the results can not be generalized to the entire Romanian higher education	link
Design of a Web-based Personalized E-learning Platform	2018	Apache , php , mysql , aws ec2	It is implemented in B/S mode, which is one of the key points of the system. Interactive ability of the system Network service quality	The limitation of this system is e-learning create isolation.	link

5. Feature

1. User Review for each course

2. Course progress tracker

3. Wish-list course

4. Categories for courses

5. Certification generation after course completion

6. Secure payment portal

7. Easy course writing with mark-down.

6. Outcome of Project

The final Outcome of the Project is as follows :

1.Certificate generation on course completion

2.Courses can be added with simple markdown editor

3.Courses can be Enrolled.

4.Course completion can be tracked.

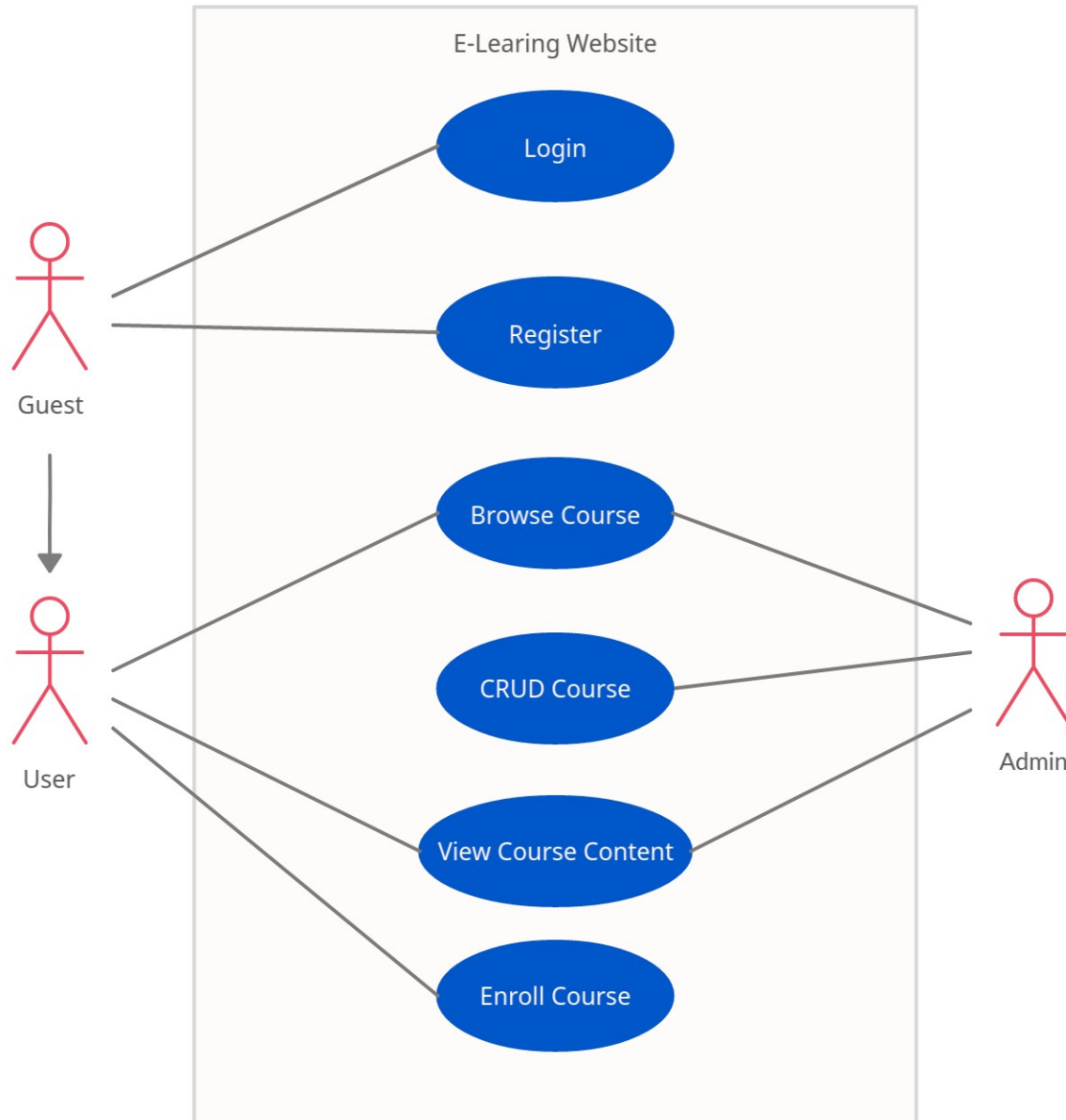# 7. Technology Stack

1. Front-end:-

    1. Framework :- React
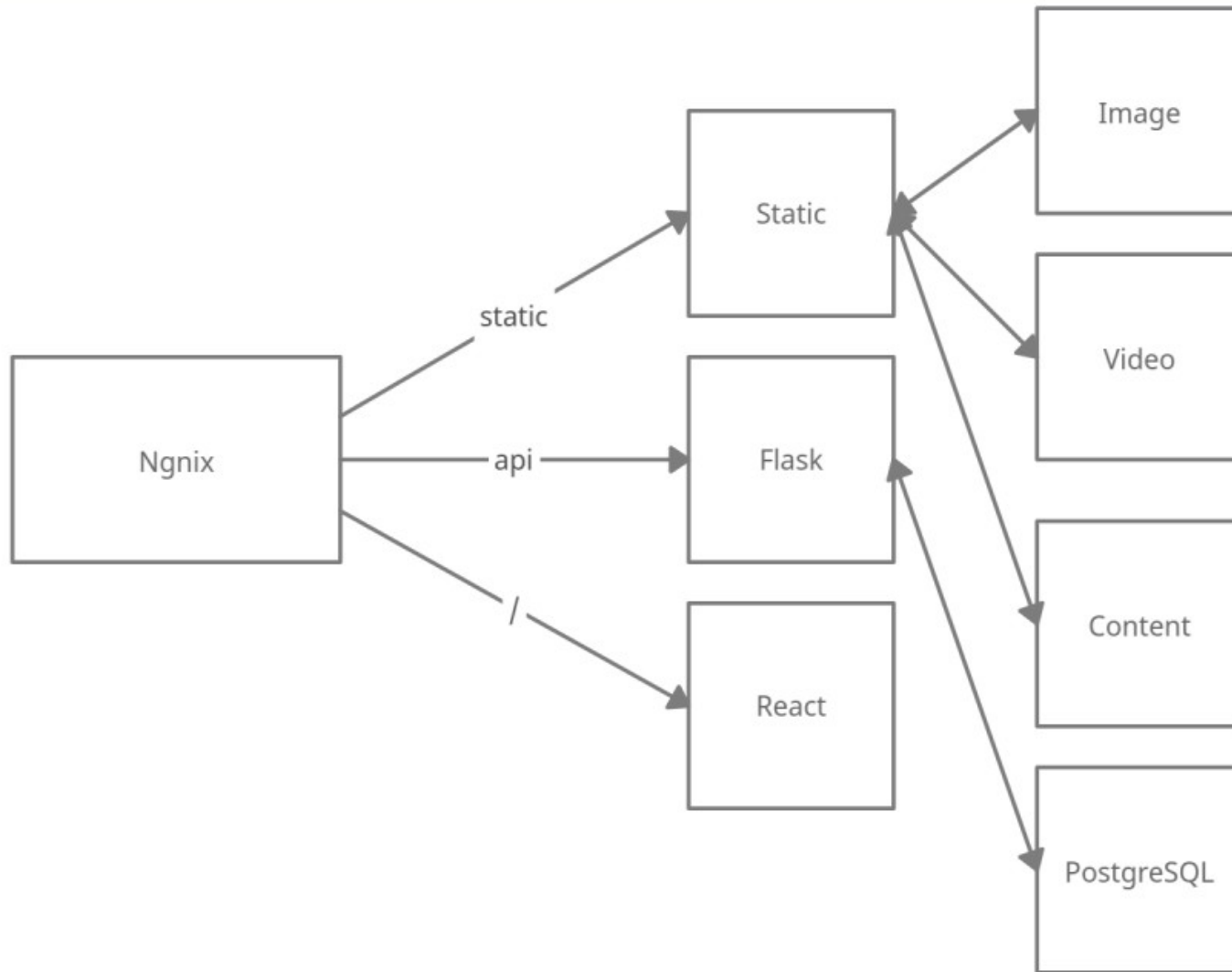
    2. State Manager:- Redux

2. Back-end:-

    1. Framework:- Flask

    2. Web-Server:- Ngnix

    3. Auth:- Basic Auth

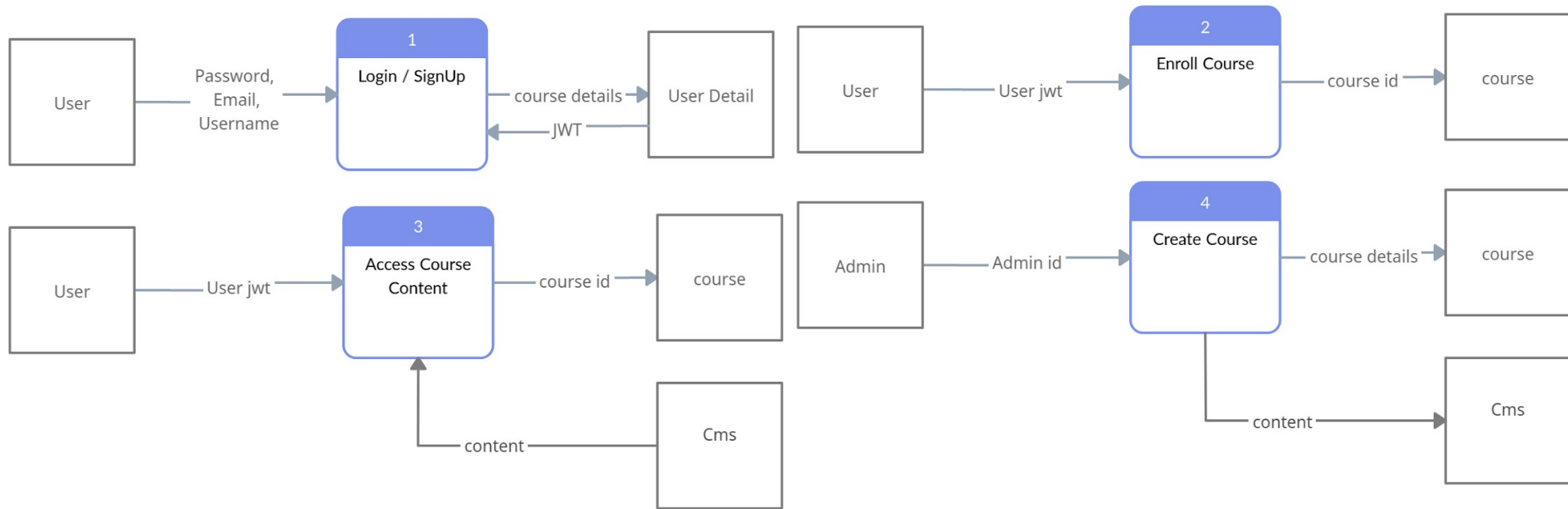   4. Security:- Json Web Token

3. Database :- PostgreSQL.

8. Use Case Diagram

9. Block Diagram

10. DFD

11. Suggestion in Review 1

1)Add video in course content

2)Add Quiz after each course module

3)Add Email Authentication

4)Tabular Literature Review

5)Course Categories

12. References

1. Courses as markdown:- https://github.com/remarkjs/react-markdown/

2. Fetch Static (i.e. videos, markdownfiles, images):-
   https://fedingo.com/how-to-use-nginx-with-flask/

3. JWT :-
   https://www.geeksforgeeks.org/using-jwt-for-user-authentication-in-flask/

4. Dockerize:-
   https://blog.miguelgrinberg.com/post/how-to-dockerize-a-react-flask-project

Thank You...!!