Online Portfolio and Career Development Platform for Students

Team-35

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Introduction

Project Description:

Students and recent graduates need to showcase their skills and academicprojects to potential employers. An online portfolio and career development platform can providethem with the tools to build a professional online presence and connect with job opportunities.

- Welcome to a transformative journey in education and career advancement! In the dynamic landscape of learning and professional development, our Online Portfolio and Career Development Platform for Students stands as a beacon, guiding you towards success.

- As you embark on this digital voyage, prepare to unlock a world of opportunities, showcase your talents, and craft a compelling narrative that propels you towards a thriving future

- Your journey begins here – where innovation meets ambition, and potential transforms into achievement.

- Welcome to a platform that not only envisions your dreams but empowers you to turn them into reality.

Project Objectives

1. **Skill Development:** Enhance and diversify students' skill sets through curated learning paths and hands-on projects.

2. **Career Exploration:** Provide tools and resources for students to explore various career paths, industries, and potential opportunities.

3. **Professional Networking:** Facilitate connections between students and industry professionals, fostering mentorship and collaboration.

4. **Portfolio Creation:** Assist students in building a robust online portfolio to showcase their achievements, projects, and skills to potential employers or collaborators.

- **Personalized Guidance:** Offer personalized career guidance and development plans based on individual strengths, interests, and goals.

- **Industry-Relevant Content:** Deliver up-to-date and industry-relevant content to ensure students are well-prepared for the demands of the current job market.

- **Job Placement Support:** Establish partnerships with companies and organizations to facilitate job placement opportunities for students completing the program.

- **Accessibility:** Ensure the platform is user-friendly and accessible to a diverse range of students, including those with varying levels of technical proficiency.

- **Measurable Outcomes:** Establish key performance indicators to measure the success and impact of the platform on students' career development and overall satisfaction.

Project Scope

- The overarching goal of this project is to empower and equip students with the necessary skills, knowledge, and opportunities to navigate and succeed in their chosen career paths. Specifically, the project aims to:

- Bridge the Gap Between Education and Employment

- Cultivate a Future-Ready Workforce

- Promote Inclusivity and Diversity

- Encourage Lifelong Learning

- Drive Career Success

Individual Contributions

- T Sai Naga Anirudh:Front end
- K Vamsi Krishna: SNS
- M Balaji Reddy: Lambda Function
- S Abhinav : S3 web hosting and storage

Project Architecture

- **Amazon S3**: For hosting portfolios and resumes.
- **AWS Lambda**: To automate job alerts and portfolio updates.
- **Amazon SNS**: For communication with recruiters and notifications.

Key Concepts

- Amazon S3 (Simple Storage Service):

- Significance: Amazon S3 is a highly scalable object storage service, and it's commonly used for storing and retrieving any amount of data. In the context of hosting portfolios and resumes, S3 can be used to store and serve static assets, such as HTML files, images, and documents.

- AWS Lambda:

- Significance: AWS Lambda is a serverless computing service that lets you run code without provisioning or managing servers. It can be used to automate job alerts and portfolio updates in response to specific events or triggers.

- Amazon SNS (Simple Notification Service):

- Significance: it provides a scalable and flexible platform for sending notifications to a distributed audience via various channels, facilitating real-time communication and alerts in your AWS architecture.

Challenges and Solutions

- The major challenge was integrating a storage object or instance to the front end

- The addition of recipient mail account using SNS via Lambda function took longer than we expected

Cost Analysis

- **S3:** Amazon Simple Storage Service   2000.0 Requests for free for 12 months as part of AWS Free Usage Tier (Global-Requests-Tier1)

- **SNS:** 1000.0 Notifications are always free per month as part of AWS Free Usage Tier (APS3-DeliveryAttempts-SMTP)

- **Lambda:** 1000000.0 Request are always free per month as part of AWS Free Usage Tier (Global-Request)

Security Measures

Authentication:

- Students and recent graduates need to showcase their skills and Faclitate networking with industry professionals

Data Protection:

- Secure Storage of files in S3

- Sensitive information through encryption, access controls, regular backups, and compliance with regulations to prevent unauthorized access and data breaches

Lessons Learned

Technical Insights:
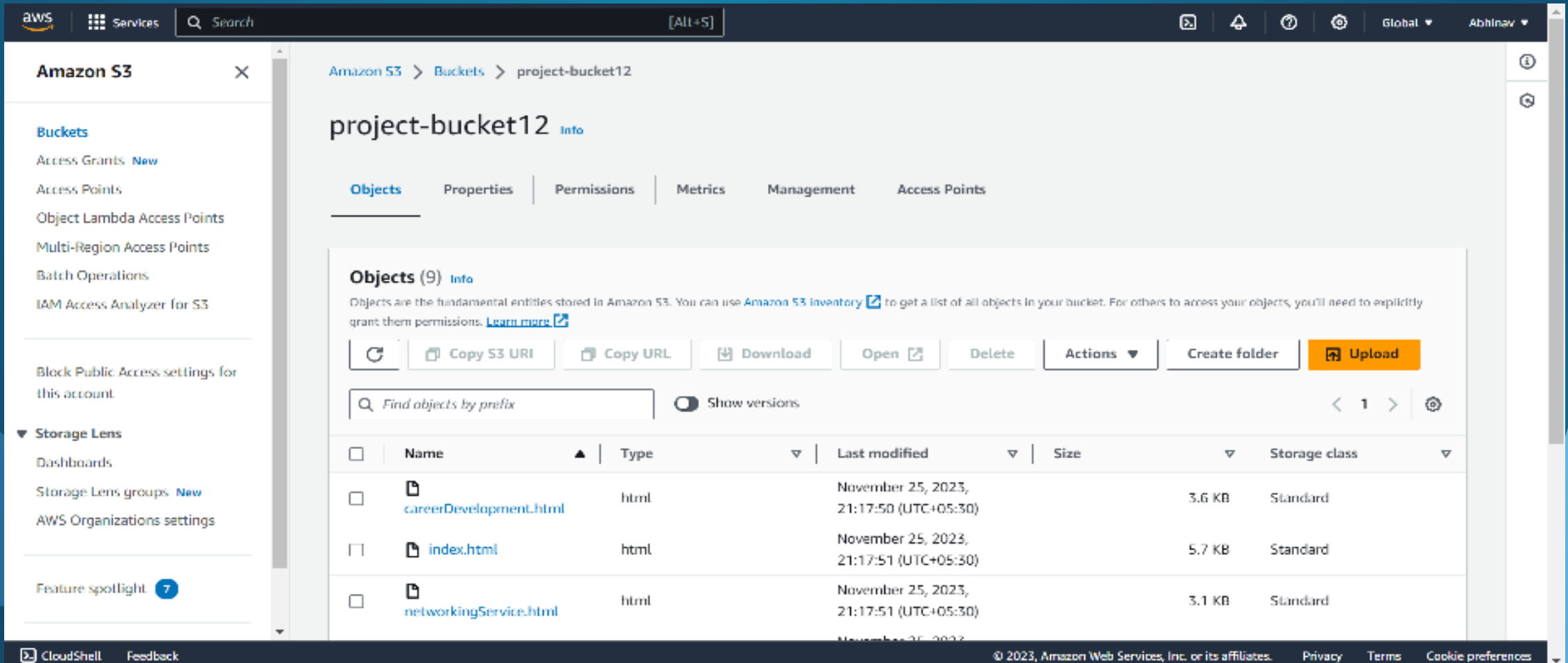
Integration of AWS and web client

Hands-on experience of using many complicated services

Process Insights:

- Communication skills

- Time Management

- Task distribution

Visual Screenshots

Amazon SNS ✕

Dashboard

Topics

Subscriptions

▼ Mobile

Push notifications

Text messaging (SMS)

Origination numbers

Details

Name
project-portfolio

Display name
-

ARN
arn:aws:sns:ap-south-1:829882108879:project-portfolio

Topic owner
829882108879

Type
Standard

< | **Subscriptions** | Access policy | Data protection policy | Delivery policy (HTTP/S) | Delivery status logging | Encryption | Tags | >

Subscriptions (1)

Edit   Delete   Request confirmation   Confirm subscription   **Create subscription**

🔍 Search   < 1 > ⚙

ID ▲	Endpoint ▽	Status ▽	Protocol ▽
○ e64f8cb2-750a-4bcd-8f0b-39b9…	abhinavashok024@gmail.com	⊘ Confirmed	EMAIL

SNS

Throttle | Copy ARN | Actions ▼

▼ Function overview   Info

Export to Application Composer | Download function

Diagram | Template

λ SNS

Layers (0)

S3

+ Add destination

+ Add trigger

Description

-

Last modified

yesterday

Function ARN

arn:aws:lambda:ap-south-1:829882108879:function:SNS

Function URL   Info

-

Code | Test | Monitor | Configuration | Aliases | Versions

Code source   Info

Upload from ▼

File   Edit   Find   View   Go   Tools   Window   **Test** ▼   Deploy

lambda_function ×   Environment Var ×   Execution results ×   ⊕

```
 2
 3    topic_arn = "arn:aws:sns:ap-south-1:829882108879:project-portfolio"
 4    def send_sns(message, subject):
 5        try:
 6            client = boto3.client("sns")
 7            result = client.publish(TopicArn=topic_arn, Message=message, Subject=subject)
 8            if result['ResponseMetadata']['HTTPStatusCode'] == 200:
 9                print(result)
10                print("Notification send successfully..!!!")
11                return True
12        except Exception as e:
13            print("Error occured while publish notifications and error is : ", e)
14            return True
15
16    def lambda_handler(event, context):
17        print("event collected is {}".format(event))
18        for record in event['Records'] :
19            s3_bucket = record['s3']['bucket']['name']
20            print("Bucket name is {}".format(s3_bucket))
21            s3_key = record['s3']['object']['key']
22            print("Bucket key name is {}".format(s3_key))
23            from_path = "s3://{}/{}".format(s3_bucket, s3_key)
24            print("from path {}".format(from_path))
25            message = "The file is uploaded at S3 bucket path {}".format(from_path)
26            subject = "Processes completion Notification"
27            SNSResult = send_sns(message, subject)
28            if SNSResult :
29                print("Notification Sent..")
30                return SNSResult
31            else:
32                return False
```

Processes completion Notification [Inbox ×]

AWS Notifications <no-reply@sns.amazonaws.com>

Tue, 28 Nov, 15:16 (1 day ago)

to me

The file is uploaded at S3 bucket path s3://project-bucket12/survey.csv

--

↩ Reply   → Forward

Future Scope

- Improvements: Potential updates or add-ons.

- Interactive Learning Modules: Introduce engaging learning segments for skill development.

- Enhanced Networking Features: Facilitate connections with professionals and industry experts.

- Virtual Recruitment Events: Host virtual career fairs and job recruitment activities within the platform.

- Next Steps: Future phases or expansions.

- Personalized Learning

- Support Feature

- Ecosystem Collaboration with educational institute students.

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http://project-bucket12.s3-website.ap-south-1.amazonaws.com

Screenshots of Online Portfolio

Your Career Journey Starts Here

Empowering individuals with the tools and resources for a successful career.
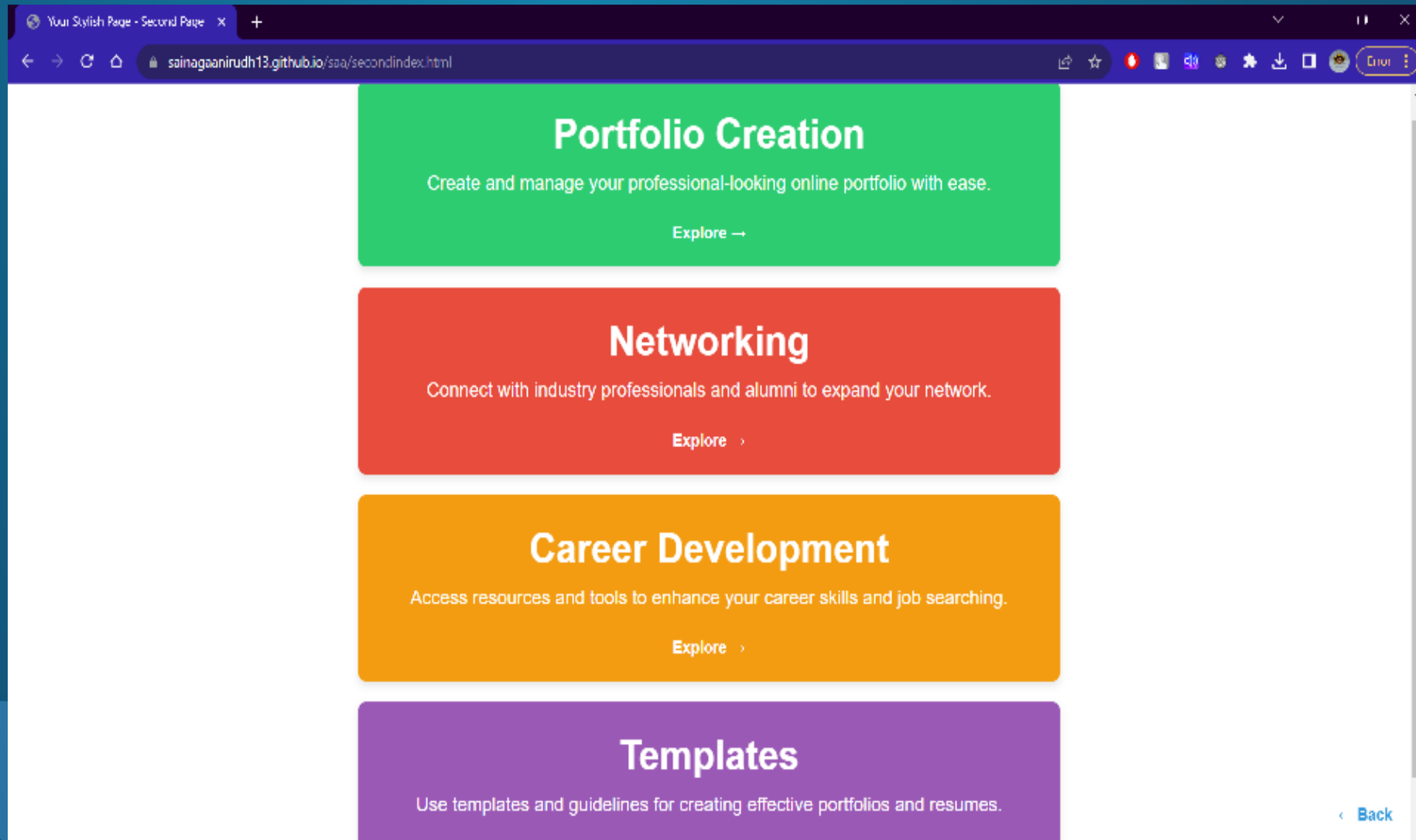
Get Started

Screenshots of Portfilio Creation

Screenshots of Online Portfolio

Screenshots of Career Development

Screenshots of Networking

LinkedIn Profile	Upcoming Networking Events	Connect with Alumni
Industry News and Updates	Discussion Forums	Networking Tips and Resources
Recommendations and Endorsements	Connection Suggestions	Privacy Settings

Questions:

 Opening the floor for any questions from the audience.

Thank You!

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