Project Plan Presentation
Advancing PreK-12 Educational Opportunities

The Capstone Experience
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Functional Specifications

• Review aggregator platform for educational opportunities and programs for PreK-12
• Connect parents, educators, and providers
• Skill trees & subject pages (subject overview and progression tracking)
• Serves professional, academic, and hobby development
Design Specifications

• New personalized home page catered to the user's preferences
• Users can like programs, follow educators, and get notifications on changes
• New skill tree for parents to track educational path
• Educators and Providers have their own profiles where they can rate programs and add programs, respectively
Screen Mockup: Home Page
Screen Mockup: Home Page
Screen Mockup: Subjects Page

STEM
From arithmetic to botany

Skill Trees Available

Aerospace   Civil Engineering   Computer Science

Recommended for you
Screen Mockup: Skill Tree
Screen Mockup: Educator Profile

Jemma Snyder
Grand Rapids, MI

Information

Experience:
Professor at Grand Valley State University (2 Years)
Professor/Associate Department Head at Central Michigan University (6 years)

Subjects

Computer Science  Cybersecurity
Screen Mockup: Educator Profile

Alexa Cafe: All-Girls STEM Camp
Date: 6/17/2020

- ★★★★★ Appropriate for Age
- ★★★★★ Knowledgeable Staff
- ★★★★★ Value
- ★★★★★ Recommend to Others

For any girl who wants to get into the STEM field, this is a great way to ease into the program, with exposure towards multiple fields within engineering and science. An amazing program!!

ID Coding & AI Academy for Teens
Date: 6/15/2020
Technical Specifications

• Front end website uses React
• Static front end hosted on AWS S3 and served using AWS CloudFront
• Back end built in Python
• Back end uses AWS Lambda for serverless computing
• Okta used for user authentication and login
System Architecture

Back End

- Git
- Python
- node
- okta
- AWS
- S3
- CloudFront
- RDS
- Lambda

Front End

- OpenSearch
- React
- Website
- Route 53
- User
System Components

• Software Platforms / Technologies
  ▪ Python
  ▪ React
  ▪ NodeJS
  ▪ Git
  ▪ Okta
  ▪ Amazon Web Services:
    ▪ S3, CloudFront, RDS, Lambda, Route 53, and OpenSearch
Risks

• Implementing and Testing AWS Lambdas
  ▪ The site will be going serverless with AWS Lambdas.
  ▪ Individual Research and meeting with client for demo on AWS Lambda structure.

• User-Friendly Application for a Wide Variety of Users
  ▪ The site must be easy to use for all our users and all their different needs on the application.
  ▪ Sectioning homepage by user, beta testing and user feedback.

• Working with Existing Code
  ▪ We must make sure that this code is running, tested, and lacks any redundancy before we can add much of our own.
  ▪ Client has provided guided documents to start off debugging.
Questions?