

Digital Coach

Weekly Summary

Digital Coach will be developed as a web application that targets anyone looking to improve their interviewing skills. The last group focused on research and prepping the use cases for our project. We will revise what they did and then start the implementation of it.

This week, our biggest advancement was getting the data set, which we have started to explore and began structuring our models. We found a similar project which we are reading into for further advice. Implementation and testing of our models will continue potentially through winter break.

We are working on getting survey responses from our stakeholder groups and face-to-face interviews from our small stakeholder groups are beginning to be completed, and should be finished before next week to finalize use cases. We will start sending out initial use cases to our advisory board to evaluate the unique value of Digital Coach.

Technical Plan

This section will describe the software and services we plan to use when developing the software for Digital Coach:

<u>Category</u>	Tool/Technology Used
Communications	
Email	Outlook
Web Conferencing	Zoom
Collaboration	
Documentation File Storage	Google Drive
File Sharing/Change Tracking	Github
Task Delegation	Notion
Web Development	
Environment	Windows, Mac OS, Linux

Browsers Supported	Chrome, Firefox
Frontend	React, NodeJS, Jest, Typescript
Backend	Express.JS, NodeJS, Jest, Typescript
Database	MongoDB
Machine Learning Container	TBD
Deployment	Heroku

Team Members

Susmitha Shailesh

Role: Project Manager

Phone number: 973-610-2799

Stevens email address: sshailes@stevens.edu

Outside email address: suzy.shailesh@gmail.com

Michael McCreesh

Role: Documentation Manager

Phone number: 631-365-4255

Stevens email address: mmccree1@stevens.edu

Outside email address: mikejmccreesh@gmail.com

Hamzah Nizami

Role: Machine Learning Manager

Phone number: 646-415-2901

Stevens email address: hnizami1@stevens.edu

Outside email address: hamzahanizami@gmail.com

Max Shi

Role: Testing Manager

Phone number: 609-240-3202

Stevens email address: mshi7@stevens.edu

Outside email address: smax253@gmail.com

Aparajita Rana

Role: Product Manager

Phone number: 917-484-2421

Stevens email address: arana3@stevens.edu

Outside email address: aparajita.rana12@gmail.com

Ming Lin

Role: Software Architecture Manager

Phone number: 201-417-2039

Stevens email address: mlin3@stevens.edu

Outside email address: minglianglin50@gmail.com

Project Leaders

Matthew Wade

Phone number:

Email address: mwade@stevens.edu

James Curley

Phone number:

Email address: curleyjf@gmail.com

Delegation of Tasks

Susmitha Shailesh

Tasks Assigned for Past Week

- Create list of use cases for MVP
- Do research on InterviewStream
- Continue to test combo of ML models to test for text sentiment analysis

Tasks Completed for Past Week

- Create list of use cases for MVP
- Do research on InterviewStream
- Continue to test combo of ML models to test for text sentiment analysis

Tasks Assigned for Next Week

- Create user stories
- Develop flow diagrams for UX
- Send out UX flow diagrams to board members to gather feedback

Michael McCreesh

Tasks Assigned for Past Week

- Continue to implement and test ML models for video sentiment analysis
- Work with team to create next semester deliverables
- Meet with headhunter and compile note about recruitment

Tasks Completed for Past Week

- Continued implementation of ML models for video sentiment analysis
- Create next semester deliverables
- Meet with headhunter and compile note about recruitment

Tasks Assigned for Next Week

- Continue to implement and test ML models for video sentiment analysis
- Develop flow diagrams for UX

Hamzah Nizami

Tasks Assigned for Past Week (these tasks are expected to take multiple weeks)

- Interview a member of the Career Center to understand their perspective on how the interview process goes for students
- Test combinations of ML models to work with for text sentiment analysis
- Begin running ML models for text sentiment analysis and analyze the best ones

Tasks Completed for Past Week

- Explored, cleaned, and parsed data sets
- Gave crash course to group on how ML will work
- Began to implement and test ML models
- Scheduled interview with Career Center member

Tasks Assigned for Next Week

- Implement, test, and refine models for text sentiment analysis.

Max Shi

Tasks Assigned for Past Week

- Develop rest of user stories according to survey feedback
- Continue to implement and test combinations of models

- Compile headhunter meeting notes

Tasks Completed for Past Week

- Developed rest of user stories according to survey feedback
- Designed process for creating contextual analysis ML model
- Compiled headhunter meeting notes

Tasks Assigned for Next Week

- Get feedback on user stories from advisory board
- Implement designed ML model
- Begin to train ML model for contextual analysis

Aparajita Rana

Tasks Assigned for Past Week

- Interview another member of the Career Center to understand their perspective on how the interview process goes for students
- Successfully download, save, and clean dataset
- Create basic structure for video sentiment analysis

Tasks Completed for Past Week

- Contacted member of the Career Center waiting to determine time and meeting
- Contacted MIT professor for data sets that could be used
- Researching how to properly explore, clean, and parse data sets

Tasks Assigned for Next Week

- Learn basics on video sentiment analysis
- Test combinations of ML models to work with for video sentiment analysis
- Obtain and split training and testing data set

Ming Lin

Tasks Assigned for Past Week

- Send out Google form to collect information from recent graduates about their experiences with interviewing
- Explore, clean, and parse data sets
- Test combinations of ML models to work with audio sentiment analysis

Tasks Completed for Past Week

- Send out Google form to collect information from recent graduates about their experiences with interviewing
- Working to clean and parse the dataset

Tasks Assigned for Next Week

- Explore Front end architecture and technologies for upcoming semester
- Explore Back end architecture and technologies for upcoming semester
- Explore implementation of models

Completion Schedule:

Key: **Green** - completed, **Yellow** - in progress, **Red** - blocked, **Unhighlighted** - not begun

Fall 2021

Goal	Create System Architecture Diagram	Due Date
KPI 1	Create System Architecture Diagram	
Task	Define frontend framework	10/28/2021
Task	Define backend framework and database platform	10/28/2021
Task	Define container for ML model	10/28/2021
Milestone	Readable backend diagram	11/4/2021
Task	Determine how each part interacts with each other	11/11/2021
Goal	Implement the Model	Due Date
KPI 1	Evaluate 1 Interview Response	
Task	Review previous research on ML model and any further research	10/28/2021
Task	Determine ML algorithm	10/28/2021
Task	Implement ML framework	11/11/2021
Milestone	Working ML algorithm given a question	11/11/2021
Task	Collect training data	11/18/2021
Task	Conduct model training and generate graph of results	11/23/2021
Task	Analyze graph and make changes to algo and repeat	12/2/2021
Goal	Project Management Strategy	Due Date
KPI 1	Setup Development Environment	
Task	Set up and invite all members to github repo	10/14/2021
Task	determine SDLC	10/14/2021
Task	and set up kanban board	10/14/2021
Task	set up testing framework and CICD	10/14/2021
Goal	Generate Wireframe & Use Cases	Due Date
KPI 1	Create UX Scheme	
Task	Research and determine most valuable use cases for MVP	11/11/2021
Task	Develop user stories	11/18/2021

Task	Define UX flow	11/23/2021
Task	Develop flow diagrams for UX	12/2/2021
KPI 2	Create Design Plan	
Task	Design website interactions (bare bone figma)	Spring
Task	Determine visual design elements (color scheme, logo, etc.)	Spring
Task	Combine website interactions with visual design characteristics	Spring
Goal	Validate MVP Goals	Due Date
KPI 1	Validate MVP concept value	
Task	Review and analyze previous research regarding value prop	10/14/2021
Task	Identify key stakeholders	10/14/2021
Milestone	1 dynamic meeting per small stakeholder group	10/28/2021
Milestone	x survey responses per large stakeholder group	10/28/2021
Task	Receive feedback on use cases from stakeholders	11/30/2021
Goal	Construct Advisory Board	Due Date
KPI 1	Have approval from advisory board on major product content decisions	
Task	Identify roles and responsibilities of board members - stay in close contact to get feedback and advice, create plan to meet consistently	10/14/2021
Task	Make contact with professionals who can provide feedback on product	10/17/2021
Milestone	Finalize 5 advisory board members	11/18/2021
Task	Send out UX flow diagrams to board members to gather feedback	11/29/2021

Spring 2022

Goal	Develop and Deploy Frontend	Due Date
KPI 1	Create Design Plan and Implement	
Task	Design website interactions (bare bone figma)	1/20/2022
Task	Determine visual design elements (color scheme, logo, etc.)	1/27/2022
Task	Combine website interactions with visual design characteristics	4/14/2022
KPI 2	Develop frontend	
Task	Stand up application (React, Next(?))	1/20/2022
Task	Implement Frontend architecture	1/27/2022
Task	Implement UI kit and styling (SCSS, Tailwind, MUI (?))	1/27/2022
Milestone	Implement component library	1/27/2022
Task	Implement views	1/27/2022
Task	Implement Unit testing framework (Jest, enzyme)	1/27/2022
Milestone	Set up CI	1/27/2022
Task	Implement state management (React Query (?))	1/27/2022

Task	Implement authentication feature	2/3/2022
Task	Implement user profile feature	2/10/2022
Task	Implement video recording feature	3/3/2022
Task	Implement feedback/data analytics feature	4/7/2022
Task	Fit and finish	4/14/2022
Goal	Develop and Deploy Backend	Due Date
KPI 1	Develop Backend	
Task	Develop architecture agreement between frontend and backend (MVC)	1/20/2022
Task	Create API endpoint list and basic documentation	1/27/2022
Task	Deploy Storage buckets	1/27/2022
Task	Deploy database and schemas	1/27/2022
Task	Implement unit testing (jest)	1/27/2022
Task	Set up CI	1/27/2022
Task	Implement authentication feature	2/3/2022
Task	Implement user profile feature	2/10/2022
Task	Implement video recording feature	3/3/2022
Task	Implement feedback/data analytics feature	4/7/2022
Task	Fit and Finish	4/14/2022
Goal	Develop and Deploy Machine Learning Models	Due Date
KPI 1	Deploy the ML models	
Task	Verify results from the NLP model	1/25/2022
Task	Verify results from the CV model	2/1/2022
Task	Verify results from the audio model	2/1/2022
Task	Verify results from the context analysis model	2/8/2022
Milestone	Integrate all ML models together and establish means of communication	2/15/2022
Task	Determine deployment method	2/15/2022
Milestone	Deploy ML models	2/22/2022
Goal	Consistently Communicate with Advisory Board	Due Date
KPI 1	Consistently communicate with advisory board	
Task	Draft message that communicates all important information from the past two weeks concisely	Biweekly
Milestone	Send biweekly emails about progress made	Biweekly
Milestone	Accept feedback on biweekly progress	Biweekly
KPI 2	Demonstrate product prototype to advisory board	
Task	Set up meeting to show Advisory Board the Prototype	3/24/2022
Milestone	Provide each member with product prototype and allow them to test it out	3/31/2022
Task	Iterate on project based on Advisory Board feedback	4/14/2022

Goal	Prepare Pitch for Innovation Expo	Due Date
KPI 1	Deliver pitch at Innovation Expo	
Task	Identify and articulate most important aspects of project to communicate (development process, business process, demonstrate MVP, etc)	4/7/2022
Task	Design poster with all relevant information	4/14/2022
Milestone	Practice presenting pitch to clients and advisors	4/21/2022