

Software Engineering Internship

An Internship Report for

Course code and Course Title: CSA-652 & Industry Internship

Credits: 16

Submitted in partial fulfillment of Masters Degree (MCA)

by

RANJANA R. RAJEEV

Seat Number:22PO320034

ABC ID:844285099021

PRN:201900337

Under the Mentorship of

Mr .Ricky Noronha / Mr. Bradley De Souza

Computer Science & Technology
Goa Business School



GOA UNIVERSITY

Date: June 2024

Examined by:

Seal of the School/Dept

DECLARATION BY STUDENT

I hereby declare that the data presented in this Internship report entitled, “Software Engineering Internship” is based on the results of investigations carried out by me in the Computer Science & Technology at the Online Productivity Solutions Pvt. Ltd., under the mentorship of Mr .Ricky Noronha/ Mr. Bradley De Souza and the same has not been submitted elsewhere for the award of a degree or diploma by me. Further, I understand that Goa University or its authorities/College will not be responsible for the correctness of observations /experimental or other findings given the internship report/work.

I hereby authorize the University/college authorities to upload this dissertation on the dissertation repository or anywhere else as the UGC regulations demand and make it available to any one as needed.

Signature and Name of Student
Seat no: 22PO320034

Date:

Place: Goa University

COMPLETION CERTIFICATE

This is to certify that the internship report “Software Engineering Internship” is a bonafide work carried out by Miss. Ranjana R. Rajeev under my mentorship in partial fulfillment of the requirements for the award of the degree of Masters of Computer Applications in the Discipline Computer Science & Technology at the Goa Business School, Goa University.

Date:

Signature and Name of Mentor

Signature of Dean of School/HoD

School/Department Stamp

Date:

Place: Goa University

CONTENTS

Chapter	Particulars	Page numbers
	Offer Letter	i
	Internship (Completion) certificate	iii
	Acknowledgments	iv
	Executive summary	v
1.	Organization/Company	
	1.1 Birds-eye-view	1
	1.2 Products/services	2
	1.3 Sections within the organization	2
2.	Task(s) handled	3
3.	Learning	20
4.	Challenges	24
	Appendix I: Samples of the work done	25
	Appendix II: Photos while you are at work	29

Offer Letter

Silver
**Microsoft
Partner**

OPSPL/PERS/64/2023-2024



26th December 2023

Ms. Ranjana R. Rajeev
F. No T-5 Shalom Appts,
Jaycee Nagar, Ponda- Goa.

Sub: OFFER OF INTERNSHIP

Dear Ranjana,

This is with reference to your application for an **Internship with our Company** and your subsequent meeting with us at our office.

We are pleased to inform you that we consider you suitable for association with the Company, as a **Software Engineering Intern**, on the following conditions:

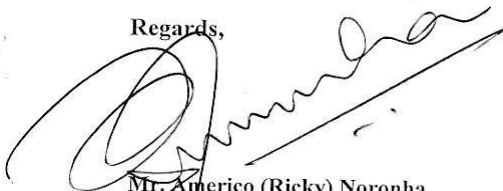
- You will be on internship for a maximum period of six months. Your performance within the company and ability to assist with project work assigned to you and learn what is required of you - efficiently and independently.
- On Internship, you will be eligible for a monthly Stipend of **Rs. 8,000/- (Rupees Eight Thousand Only)**.
- On completion of the Internship period and on you meeting all required conditions to complete the Internship successfully, your performance will be reviewed and if found satisfactory, you will be offered to regularise your status in the Company.
On Regularisation, you will be entitled to all Company facilities, incentives and increments thereafter, commensurate with your performance.

This offer to join for Internship is valid till **15th January 2024**, latest by which day you should join.

You are advised to peruse the Company Personnel Policy for the relevant Company rules and regulations as will be applicable to your Internship.

We hope you will justify your association with us by taking this opportunity to perform your duties to the best of your ability.

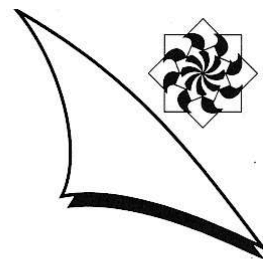
Regards,



Mr. Americo (Ricky) Noronha,
Director,
for Online Productivity Solutions Pvt. Ltd.



OPSPL/PERS/64/2023-2024
Ms. Ranjana R. Rajeev
Software Engineering Intern



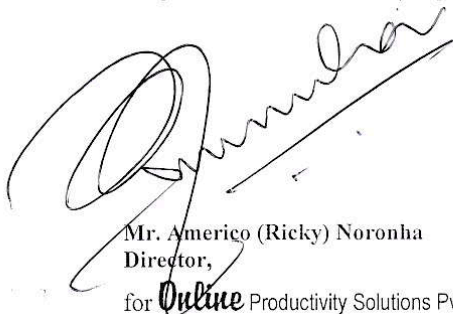
Terms of Internship / Job Description & Responsibilities

In the post **Software Engineering Intern**, you will be required to:

- Assist the in-house Teams develop custom software solutions and work on existing software solutions for our new and existing Company clients.
- Work with the tools and technologies that we use in-house to understand current IT solutions and assist with, specify and develop new solutions as required.
- Work with our in-house Support Team to plan and co-ordinate support for existing clients on Company software projects.
- As an Intern member of the Development Team, we expect that you will also be actively involved in the development of your knowledge on all the areas we work with here.
- Co-ordinate with appointed in-house Guide / Project Team Leader on a regular basis.
- Assist with other areas of the Company's software projects as required.

Please note that:

- You will need to make your own travel arrangements within Goa State. For travel to places out of Goa State, when required for work/training, the Company will make your travel arrangements. For travel and/or stay at places out-of-Goa State, you will be reimbursed on actual expenditure (against bills for the same).
- We are Goa's foremost IT Software Solutions Company. You will need to familiarise yourself with and understand current Best Practices in IT Software Solutions and Services and the testing and implementation of the same, the solutions we develop implement and support for clients and the different tasks and stages therein.
- As an Intern, you will need to work towards being an IT-savvy Software professional, capable of handling software design projects with existing and new clients, to their full satisfaction. Our clients are some of the best-known names in the industry.
- As an Intern with no development experience, we do understand that you may currently have limitations to your knowledge and/or exposure to IT Solutions and support. We trust you will make every endeavour to overcome these in the shortest possible time. On our part, we will provide all the necessary inputs for you to achieve this.


Mr. Americo (Ricky) Noronha
Director,
for **Online** Productivity Solutions Pvt. Ltd.



Internship (Completion) Certificate

Microsoft Partner

Silver Hosting
Silver Datacenter
Silver Midmarket Solution Provider

Microsoft
Sales Specialist
Sales Platform
Private Cloud Page & Web
Midmarket Solution Provider

Online
Productivity
Solutions Pvt. Ltd.



INTERNSHIP CERTIFICATE

This is to certify that Ms. Ranjana R Rajeev, Student of the Goa Business School, undergoing Masters of Computer Applications has successfully completed Internship between 2nd January 2024 to 31st May 2024 and will be here till end of June 2024; at M/s Online Productivity Solutions Pvt. Ltd.

She actively participated in the activities during the period of internship and learned the skills needed for various activities such as FOSS System Front End Developer Intern.

During her training period, we have found her to be hard working and she has applied herself well to all the work that was assigned to her.

Her attendance and conduct were found to be good and she has been cooperative and sincere.

Mr. Americo B M Noronha
Director,
for **Online** Productivity Solutions Pvt. Ltd

Verna – Goa
Dated: 31st May 2024
Ref. No.: OPSPL/PERS/003/2024-2025

S-1, Second Floor, Casa de Alegria, Near (old) Verna Panchayat, Verna, Salcette, Goa, 403 722, India.
Mobile: (+91) 94224 39593

✉ : info@opspl.com OR support@opspl.com 🌐 : <http://www.opspl.com>
== Microsoft Partner, Linux, PostgreSQL and MySQL registered Consultants ==

ACKNOWLEDGMENTS

I would like to express my sincere gratitude to all those who contributed to the success of my internship at Online Productivity Solutions Pvt. Ltd.(OPSPL) .

First and foremost, my sincere gratitude to Mr. Ricky Noronha, who is the director of OPSPL. I want to thank him for giving me the opportunity to do my internship at his company. He had the kindness to accept me into his company and guide me through my internship with advice and feedback, despite his busy schedule.

I thank my mentor, Mr. Bradley De Souza, for his support and constant supervision, which contributed immensely to my personal development. I also thank him for his guidance, which was a remarkable force that enabled me to successfully complete the internship program. He helped and coached me during my internship by giving me feedback and tips on how to handle and approach situations.

I am also thankful to the rest of the OPSPL staff for their support and guidance, which helped me overcome the challenges I faced during the internship.

I would like to thank my university mentor, Ms. Yma F. Pinto, for providing valuable advice and ensuring a smooth transition between my academic and the professional world.

Lastly, I am grateful to Goa University for providing me with the opportunity to serve as an intern, enabling me to acquire invaluable practical knowledge.

My professional development has really benefited from this internship experience, and I am thankful for everyone who helped me make it possible.

EXECUTIVE SUMMARY

This internship report summarizes my experience as an software engineering intern at Online Productivity Solutions Pvt. Ltd. It contains the details about what I have done and what practical knowledge I gained during internship.

Organization

Online Productivity Solutions Pvt. Ltd. is an Project based company that works on different projects from different clients. It has around 80 employees. It is located in the verdant South-Goan village of Verna, Salcette and offers total IT services and solutions. They Provide the highest quality services to offshore as well as domestic clients in Custom Cloud-based Systems Design and Development, App Development, Customized Software Development, Networking Solutions, IT Consultancy, Back-Office and Digital Marketing Services.

Tasks Handled

My responsibility was to contribute to the frontend development of the web application for Estill Voice and Clin-ED. My tasks involved :

- Building interactive user interfaces using React JS, AntDesign and Sass.
- Integrating APIs in user interface.
- Utilizing git for efficient code management and collaboration.
- Communicating with the back end team and other senior frontend developers for effective collaboration.

Learning

In this internship I got to learn React JS, AntDesign and Sass which were later used in the project. I also sharpened my problem solving skills by solving various frontend issues and bugs. Also learned the best practices and code optimization techniques for effective development.

Challenges

I encountered various challenges while being on internship such as unfamiliar technologies, complex project concepts, coding rules, debugging issues etc. However, seeking guidance and help from seniors and utilizing available resources on the internet, I successfully overcame these challenges.

CHAPTER 1: ORGANIZATION/COMPANY

M/s Online Productivity Solutions Pvt. Ltd.

Established in August 1995. Goa's oldest IT Solutions Company.

Duly Registered SOFTEX Company and Software Services Exporter.

1.1 Birds-eye-view

Online Productivity Solutions Pvt. Ltd. is a fully Goan Information Technology company, nestled in the verdant South-Goan village of Verna, Salcette and offering total IT services and solutions.

Providing the highest quality services to offshore as well as domestic clients in Custom Cloud-based Systems Design and Development, App Development, Customized Software Development, Networking Solutions, IT Consultancy, Back-Office and Digital Marketing Services.

Incorporated in 1995 by a group of experienced IT professionals, Online Productivity Solutions Pvt. Ltd. has seen the World Wide Web grow and revolutionize the world.

Committed to providing the latest and most advanced solutions to partners and clients;

Online – Goa is a Microsoft Certified Partner, listed Linux, Enterprise-ready, MySQL and PostgreSQL consultant.

1.2 Products / Services

Customized Cloud based systems design, development, implementation and support.

App development across the Microsoft and FOSS development Platforms.

Outsourced system development and DevOps Solutions being provided to clients in all continents on both the Microsoft and FOSS Platforms.

Full range of Digital Marketing, SEO and SMM Services.

1.3 Sections within the Company

Management Team

Admin, Accounts and HR Team.

Project Management and Coordination Team

QA and Testing Team

FOSS Dev Platform:

Back End Development Team (PHP / Python)

Front End Development Team (React.Js)

Microsoft Dev Platform:

Back End Development Team (C#, Asp.Net, MS Azure)

Front End Development Team. (MS Azure, React.Js)

UI-UX and Design Team: (React.Js)

DevOps Team:

Microsoft Systems DevOps Team

FOSS Systems DevOps Team

Digital Marketing and Internet research Team

CHAPTER 2: TASK(S) HANDLED

2.1 Which Section(S) You Worked In?

Initially I worked on the Estill Voice Project, frontend development. I built a responsive user interface using React.js and Ant Design. This interface connects to the back-end system using API integration, which essentially acts as messengers between the user-facing part and the data storage. To make sure information is entered correctly, I implemented clear and efficient validation checks for forms. Additionally, I designed well-organized tables from Ant design for easy access and display of information.

During the development of the Estill Voice Project, we referred to the previous old installable software application of Estill Voice as a foundation. We focused on improving functionality in the new Estill Voice Project and also wrote optimized code.

W.e.f. 1st April 2024, the Estill Voice Project was paused by the US client. Even though they were happy with our work on the project, they had problems with their funds and have paused their project till they get their funding.

I was then shifted to another running project in the same technical and development platform area.

Currently, I'm leveraging these skills on the Clin-ED Project. Even for this project I'm doing front-end development, where I'm using React.js, Ant Design, and Sass to design and build responsive user interfaces. Similar to the Estill Voice Project, in this project I'm working on creating responsive screens, integrating APIs for smooth data flow, implementing form validations, and designing informative tables.

During the development of the Clin-ED Project front-end, we referred to the existing Clin-ED project as a foundation. We focused on code optimization and avoiding unnecessary duplication, we reduced the code base while also increasing functionality in the new Clin-ED.

2.2 Your Working Schedule (Date And Time Every Day)

My schedule is five days a week(Monday to Friday), from 9:00 a.m. to 6:30 p.m..

2.2.1 Weekly Report

Week 1 (1st Jan - 5th Jan):

- **Task Names:** Orientation, Checklist design, React Docs & Ant designs docs, Meeting with director, Create a ReactJS Application, Crud operations
- **Description:**
 - Attended company orientation, signed the contract.
 - Read documentation on checklist design and basics.
 - Started learning React and Ant Design through documentation and videos.
 - Attended a detailed meeting with the director about ongoing projects.
 - Created a basic ReactJS application with table and form components.
 - Watched videos on CRUD operations using Ant Design.

Week 2 (8th Jan - 12th Jan):**Project: OPSPL- Test**

- **Task Names:** Cont. of ReactJS Application
- **Description:**
 - Implemented various CRUD operations in the ReactJS application including adding, editing, and deleting rows, using fetch API, and adding validations.
 - Worked on enhancing the table functionalities like sorting, pagination, and display features.
 - Made code changes and corrections based on feedback.

Week 3 (15th Jan - 19th Jan):**Project: OPSPL- Test & Estill Voice Project**

- **Task Names:** Cont. of ReactJS Application, Axios videos, Presentation, Estill Voice Project demo, Routes videos and project
- **Description:**
 - Continued improvements on the ReactJS application including form submission, row sorting, and API integration.
 - Watched videos on using Axios for API requests.
 - Presented on Component styling.
 - Participated in a project demo for the Estill Voice project, watched videos on Git commands.
 - Watched videos on routing and familiarized with the Estill Voice project code, started working on admin password change functionality.

Week 4 (22nd Jan - 26th Jan):**Project: Estill Voice Project**

- **Task Names:** Passing components videos, Presentation
- **Description:**
 - Implemented update password functionality for admin users and added validation checks.
 - Cleared field values after successful password updates.
 - Watched videos on updating child components from parent components.
 - Researched and implemented server-side pagination for subscriber listing.
 - Presented on Routing with React Router.

Week 5 (29th Jan - 2nd Feb):**Project: Estill Voice Project**

- **Task Names:** Docs on React Google charts, Presentation, Meeting
- **Description:**
 - Added API integration and server-side pagination for subscriber and archived staff users listing in the Estill Voice project.
 - Researched React Google Charts and experimented with different charts for dashboard creation.
 - Viewed a presentation on "What not to do" by seniors and Ricky sir.
 - Implemented active subscribers count API and created a pie chart using the API data.
 - Used Ant Design's card component to display 7 dashboard components, implemented recent users API, and created charts and a notice board.
 - Attended talks on databases and project overview.

Week 6 (5th Feb - 9th Feb):**Project: Estill Voice**

- **Task Names:** Dashboard
- **Description:**
 - Made layout changes to the dashboard, used cards and bar charts to display data, and updated APIs.
 - Added new user count to the dashboard and implemented input field formatting.
 - Implemented internationalization for various pages including SPL calibration, frequency markers, and multiple modals.

Week 7 (12th Feb - 16th Feb):**Project: Estill Voice**

- **Task Names:** React-i18 Next, ConfigProvider - Ant Design
- **Description:**
 - Continued internationalization implementation for additional pages.
 - Created a new branch for internationalization and pushed changes.
 - Researched Ant Design's ConfigProvider and watched a video on Git Rebase vs Merge.
 - Developed a function for translating page content.

Week 8 (19th Feb - 23rd Feb):**Project: Estill Voice**

- **Task Names:** Translations
- **Description:**
 - Added translations to login, admin login, and registration pages.
 - Created reusable components for storage checks and added tooltips.
 - Updated the translate function and added translations to profile and library.

Week 9 (26th Feb - 1st Mar):**Project: Estill Voice**

- **Task Names:** Notification
- **Description:**
 - Created notification and notification drawer components with various functionalities including message creation. Researched and integrated TinyMCE React editor.
 - Developed Protocol Manager component with various features like dropdowns, input fields, and validation.

Week 10 (4th Mar - 8th Mar):**Project: Estill Voice**

- **Task Names:** Protocols Manager
- **Description:**
 - Added functionalities to ProtocolsManager including uploading files, validation, and restructuring file components.
 - Used Ant Design table inside collapse to display exercises.

Week 11 (11th Mar - 15th Mar):**Project: Clined (Clin-Ed)**

- **Task Names:** Project setup, Advisor Signup page
- **Description:**
 - Set up the project and explained its details.
 - Completed the UI for the advisor signup page and integrated APIs for listing and adding advisors.
 - Created modals for adding advisors and implemented validations and delete functionality.

Week 12 (18th Mar - 22nd Mar):**Project: Clined (Clin-Ed)**

- **Task Names:** Advisor Signup page
- **Description:**
 - Added a modal to confirm deletion and integrated APIs for edit functionality.
 - Implemented send button logic and worked on search and print functionalities.

Week 13 (25th Mar - 29th Mar):**Project: Clined (Clin-Ed)**

- **Task Names:** Advisor Signup page, Student Advisor Signup page
- **Description:**
 - Added disable function to send and add buttons based on conditions.
 - Implemented row selection function on the table and created routes for StudentAdvisorSignup.
 - Developed the StudentAdvisorSignup page, implemented APIs for fetching advisor timings, created UI components, and added enable/disable logics.

Week 14 (1st Apr - 5th Apr):**Project: Clined**

- **Task Names:** Student Advisor Signup page, StudentNotes, Staff Notifications
- **Description:**
 - Optimized code and edited functions for Student Advisor Signup page.
 - Corrected payload and added validations for the save function in Advisor Signup.
 - Created Student Notes page and integrated API, added a table and modal for signatures.
 - Integrated API for saving student signatures using React canvas.
 - Developed Staff Notifications page, added routes and researched Ant Design alerts.
 - Added Ant Design alerts for notifications and integrated API to display content.

Week 15 (8th Apr - 12th Apr):**Project: Clined**

- **Task Names:** Notifications, Notification (staff-side), Notification (student-side)
- **Description:**
 - Used alert icons and colors based on priority for notifications and added date/time.
 - Added URLs, routes, and cancel button logic to notifications.
 - Created a popover for the notification icon, listing notifications with a badge, and customized the scrollbar.
 - Implemented student mentor request UI and API integration for save functionality.

Week 16 (15th Apr - 19th Apr):**Project: Clined**

- **Task Names:** StudentMentorRequest, UI updation, Student advisor signup page
- **Description:**
 - Implemented save functionality for Student Mentor Request page and added loader in Student Advisor Signup.
 - Added links to notifications in the header and color-coded alert icons based on priority.
 - Created UI for no notifications and implemented the logic.
 - Developed My Courses page with Ant Design tabs for courses and history.
 - Implemented search functionality for My Courses page and updated notification component.

Week 17 (22nd Apr - 26th Apr):**Project: Clined**

- **Task Names:** Notification, Report (college purpose)
- **Description:**
 - Implemented route conditions for Advisor Signup and Notification components.
 - Worked on an internship report for college purposes.

Week 18 (29th Apr - 3rd May):**Project: Clined**

- **Task Names:** Changes
- **Description:**
 - Changed the time format to 12-hour in Student Advisor Signup and implemented delete button logic in Advisor Signup.
 - Added alert message for unsent time slots in Advisor Signup.
 - Highlighted search terms in tables and updated error messages.
 - Added loading functionality to Student Advisor Signup and adjusted alert message spacing.
 - Updated success and error messages, aligned numbers in tables, and changed notification colors.

Week 19 (6th May - 10th May):**Project: Clined**

- **Task Names:** Changes
- **Description:**
 - Updated error messages in Advisor Signup, added constants, and changed time formats for UI.
 - Changed name sorting in staff side of faculty and adjusted table column width.
 - Disabled edit and send buttons for past dates.
 - Updated input fields for student names to display on click.
 - Ensured consistency in error messages.

Week 20 (13th May - 17th May):**Project: Clined**

- **Task Names:** Changes
- **Description:**
 - Removed advising dates that have passed, showing previously selected slots.
 - Updated time validations for 'to' and 'from' times.
 - Changed deactivated row color, added tags to course names, and updated constants.
 - Added start year column and updated UI of My Courses page.

Week 21 (20th May - 24th May):**Project: Clined**

- **Task Names:** Advising Documents (Add), Advising Documents (View All Notes)
- **Description:**
 - Created modal for Advising Documents, used an editor for notes, and added canvas for signatures.
 - Developed UI for viewing all notes for single and all students.
 - Integrated API for saving notes in the add modal with basic validations.
 - Integrated API for viewing all notes of a particular student and updated breadcrumbs.

Week 22 (27th May - 31th May):**Project: Clined**

- **Task Names:** Advising Documents
- **Description:**
 - Added a checkbox for viewing all students in Advising Documents and updated payload conditions.
 - Updated API integration for viewing and editing notes and changed the payload.

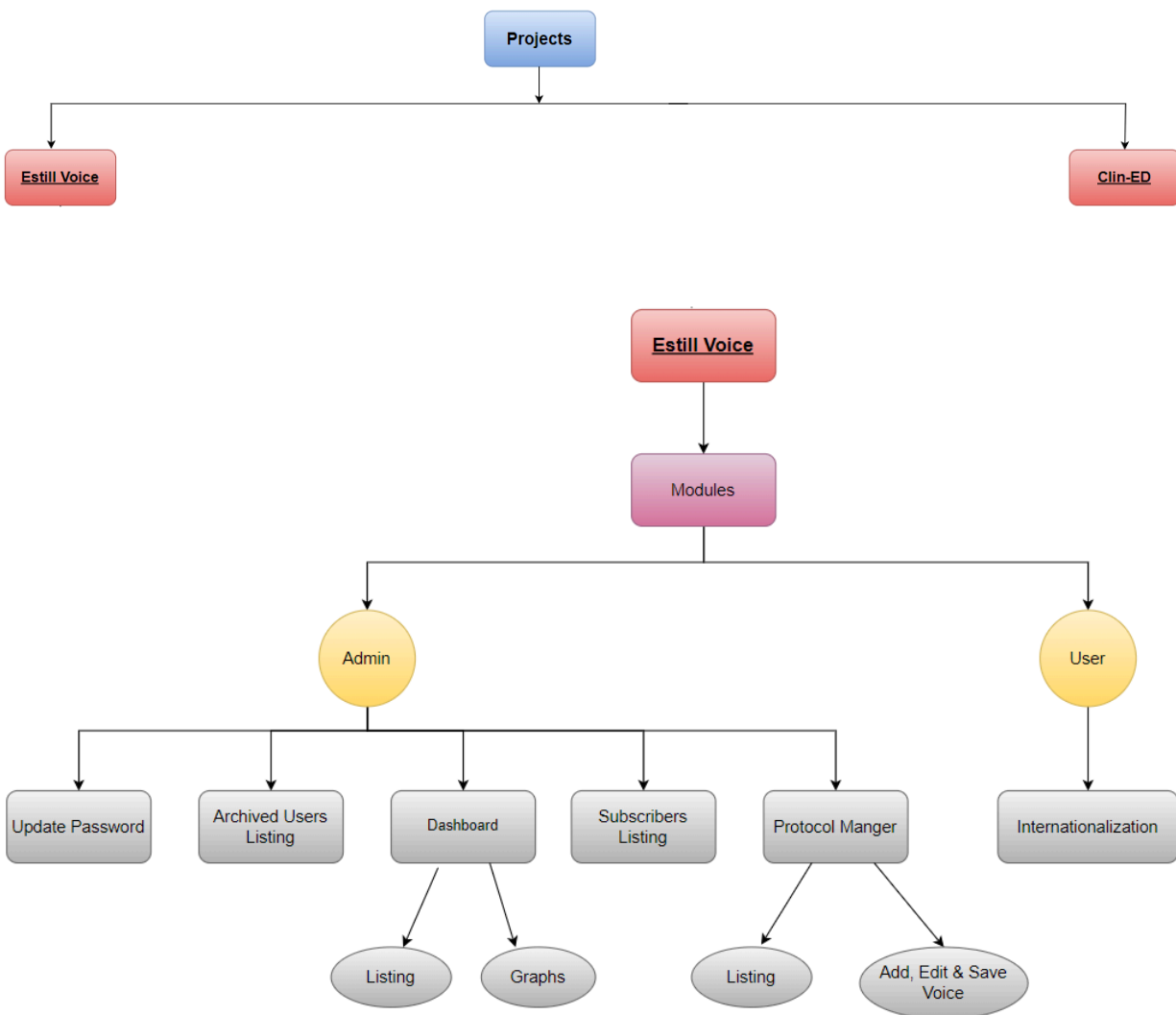
2.3 Type Of Task(S) You Were Exposed To

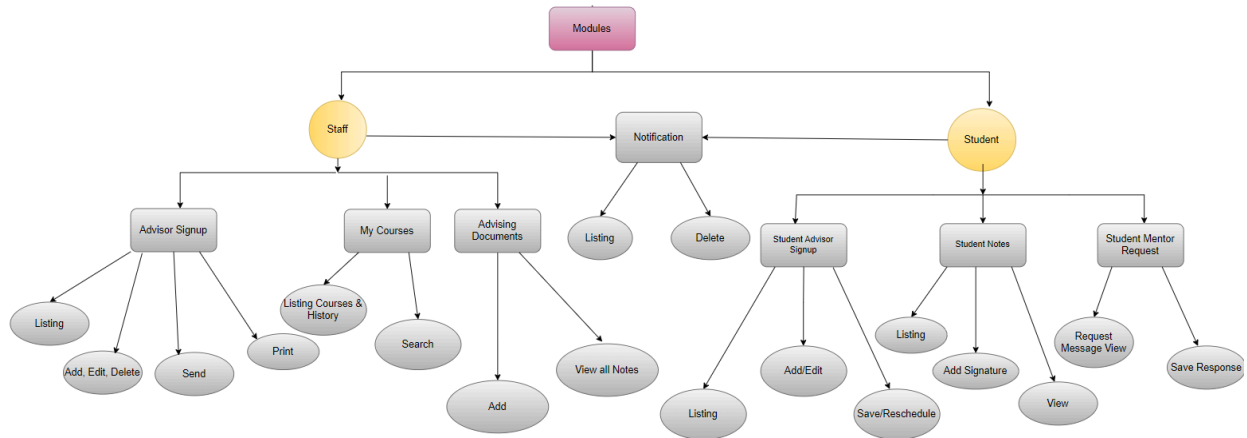
- Built and maintained the user interface (UI) using React.js framework.
- Enhanced UI visual appeal with Ant Design library.
- Utilized Sass for efficient and organized UI styling.
- Ensured cross-browser compatibility for optimal user experience.
- Integrated APIs for seamless data flow between UI and back-end system.
- Implemented git for version control and efficient code management.
- Enabled future UI translations using the i18next library.

2.4 Hands-On Experience (Number Of Cases Handled)

During my internship, I worked on a project named Estill Voice and currently working on a project named Clin-ED.

Diagram of Projects and Modules worked on:

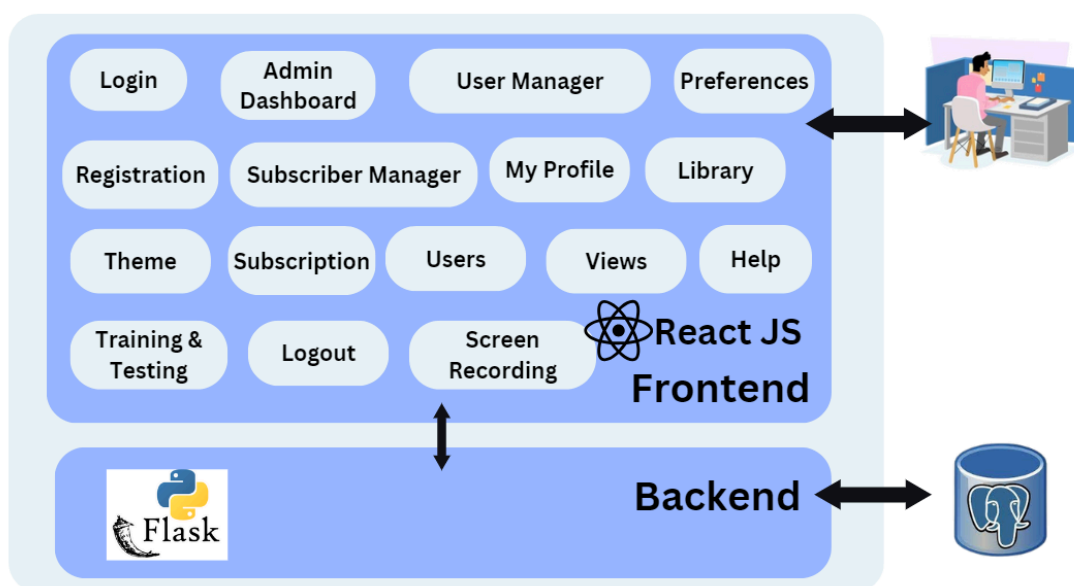




Project 1: Estill Voice

Overview of project:

Estill Voice Training (EVT) is a voice training project embraced globally by artists, instructors, clinicians, and researchers, EVT offers unbiased vocal techniques for diverse applications. EVT enables users to create a diverse range of vocal sounds for any situation or style, including therapeutic intervention in speech therapy. Initially the client had a downloadable application for the PC's older version so the client wanted to add new features and put the new project to the cloud using new technologies.



Tasks handled:

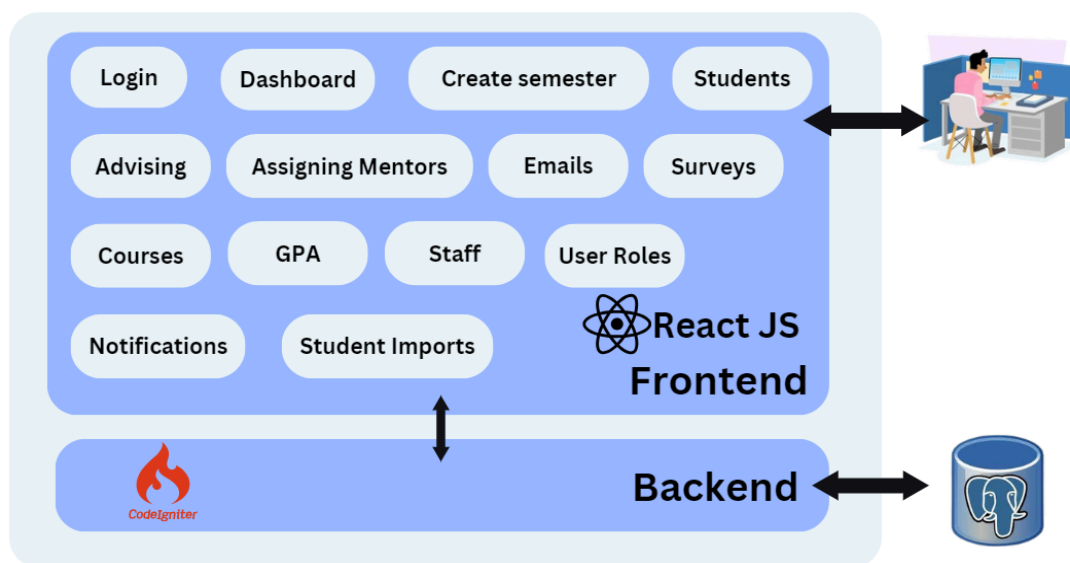
I have handled several tasks in the Estill Voice Project. This hands-on experience allowed me to:

- Implement unique and reusable components for the UI of the website, efficient code and a good user experience.
- Integrated various APIs across different website screens, enabling features and functionalities tailored to each screen.
- Used validation functionality for different input fields to ensure that the users enter data in the correct format.
- Learned and implemented i18Next library to enable website translations, which can be used by a wider audience.
- Effectively used git commands for version control, efficient code management, collaboration between team members, and rollback of codes when required.
- I learned about routes and various Ant Design components, using linters like SonarLint, ensured the quality of code and its efficiency throughout the development process.

Project 2: Clin-ED

Overview of project:

Clin-ED project is for Misericordia University, which specializes in speech language pathology. The project is divided into two parts, i.e. academics and clinical. Previously, javascript was used as frontend and CakePHP was used as the backend for the education part of this project. Now its been redone using new technologies i.e. ReactJs and CodeIgniter.



Tasks handled:

I'm currently working on the Clin-ED Project and have handled the tasks assigned by my mentor. This hands-on experience allowed me to:

- Built a user-friendly website pages with reusable UI components and API integration for on each screen. Additionally, usage of validation ensures users enter data correctly.
- Implemented interactive elements like search filters, pop ups, navigation menus, print functionality, routing for seamless page transitions, and onClick events for user interaction.

- Work on various screens in the website and implement its whole functionalities along with the logics involved in it, Api integration and interacting with seniors for guidance.

2.5 Relationship of The Task With The Course You Studied In The Classroom

The internship provided a valuable bridge between my university studies and real-world development.

My university foundation in CSS and HTML helped in designing user interfaces on the projects. My understanding of JavaScript became helpful in implementing interactive features using React.js.

Furthermore, the version control skills I acquired at university, specifically using git commands, provided an important role for efficient code management during the internship.

CHAPTER 3: LEARNING

3.1 What Did You Learn From The Practical Exposure

My internship journey provided a chance to learn and grow, I've got the exposure to many things.

Technical Skills

During my internship journey, I learned ReactJS, AntDesign, SASS, i18next and Git commands, which I have used to implement the user interfaces in the projects.

- **React JS**

An open-source JavaScript library for building user interfaces (UIs) of web applications.

Features

Component-based architecture: Breaks down UI into reusable components for efficient and scalable development.

Declarative approach: Focuses on describing the UI state, leaving rendering to React for optimal performance.

Virtual DOM: Enables efficient updates to the UI by only re-rendering what's changed.

JSX syntax: Combines HTML-like tags with JavaScript for intuitive component creation.

Rich ecosystem: Offers a vast library of additional tools and functionalities.

- **Ant Design**

An open-source UI component library built for React projects.

Features

1. **Pre-built components:** Provides a wide range of components like buttons, forms, menus, and more, saving development time.
2. **Customization options:** Allows tailoring component appearance to match your project's design.

3. **Easy integration:** Seamlessly integrates with React for a smooth development experience.
4. **Accessibility focus:** Ensures components are usable by everyone, including people with disabilities.

- **Sass**

A preprocessor for CSS that extends its functionality.

Features

1. **Variables:** Stores reusable values (like colors or fonts) for consistent styling.
2. **Mixins:** Groups reusable code snippets for efficient and maintainable styles.
3. **Nesting:** Organizes styles hierarchically for better readability and maintainability.
4. **Functions:** Allows for complex calculations and logic within your styles.
5. **Reduced code duplication:** Lessens repetitive code by using variables and mixins.

- **i18next**

An internationalization library for building multilingual web applications.

Features

1. **Translation management:** Provides tools to manage translations for different languages.
2. **Dynamic content rendering:** Displays content in the user's preferred language based on settings.
3. **Pluralization support:** Handles plurals correctly for different languages.
4. **Interpolation:** Allows embedding variables within translated strings for dynamic content.
5. **Multiple language support:** Enables building applications that cater to a global audience.

- **Git commands**

A version control system for tracking changes in code over time.

Key commands

1. `git init`: Initializes a new Git repository for your project.
2. `git add`: Adds files to the staging area for version control.
3. `git commit`: Creates a snapshot of the project's state with a descriptive message.
4. `git push`: Pushes your code changes to a remote repository (e.g., GitHub) for collaboration.
5. `git pull`: Downloads changes from a remote repository to your local project.
6. `git branch`: Creates and manages branches for working on different features without affecting the main codebase.
7. `git merge`: Combines changes from different branches back into the main codebase.

Problem Solving

By working on the Estill Voice project I have got various guidance from my seniors and mentors which helped me improve my problem-solving skills. Through tackling various minor front-end issues, I could use those skills in the current project which I'm working on.

Collaboration

I have collaborated with the backend teams and seniors on the projects I have worked on to understand API functionality along with its logic and with other frontend developers and with my seniors and mentor to optimize the code and to get the flow of the project.

Project Management

Beyond the technical skills, working on the projects also provided a valuable opportunity to learn about project management tools. This helped me to effectively organize and prioritize tasks, ensuring I met deadlines efficiently.

3.2 Have You Had An Opportunity To Be Innovative In Handling Task(S)? – The Way You Introduced New Practices That Cut Short The Time Required, Enhanced Quality In The Output, Etc.

Throughout my internship, I have had the chance to put my knowledge to good use. I learned how to write less code by making use of functions, props, and reusable parts. This has a number of advantages as it greatly decreased the amount of code required, avoiding redundancy, by using props to pass data efficiently and by building reusable components, accelerated development time because I wasn't writing duplicate code, which sped up development, improved quality of the code that is easier to manage it.

3.3 Have You Learned Something About Yourself (Your Abilities Vis-A-Vis Expectations Of Your Reporting Officer, Your Likes And Dislikes)

Yes, during my internship, I discovered my aptitude for code optimization. At first, I was more focused on getting things done, but my mentor encouraged me to develop more efficient and well-organized code. Working on these projects has taught me practical ways to leverage functions, properties, and reusable components to reduce code duplication. This also reduced the amount of time needed for development while improving the code.

CHAPTER 4: CHALLENGES

4.1 The activity that you were unaware about

- When I started my internship, writing super-efficient code wasn't a strong suit of mine. But, my mentor helped and guided me on the best practices to write cleaner and reusable code.
- I found debugging to be challenging, I have missed errors in my code or neglected to include key functionality, but my mentor helped me.
- At first, I wasn't sure about the project's overall goals, but the director and senior colleagues were helpful in explaining the project's bigger picture and my role within it. This helped me to be more confident and focused on my tasks.
- Version control with Git was another area where I needed to learn. There were a bunch of commands I was unfamiliar with. My senior colleagues helped me through the most important commands and best practices, which changed the way I manage code versions now.

4.2 Meeting deadlines

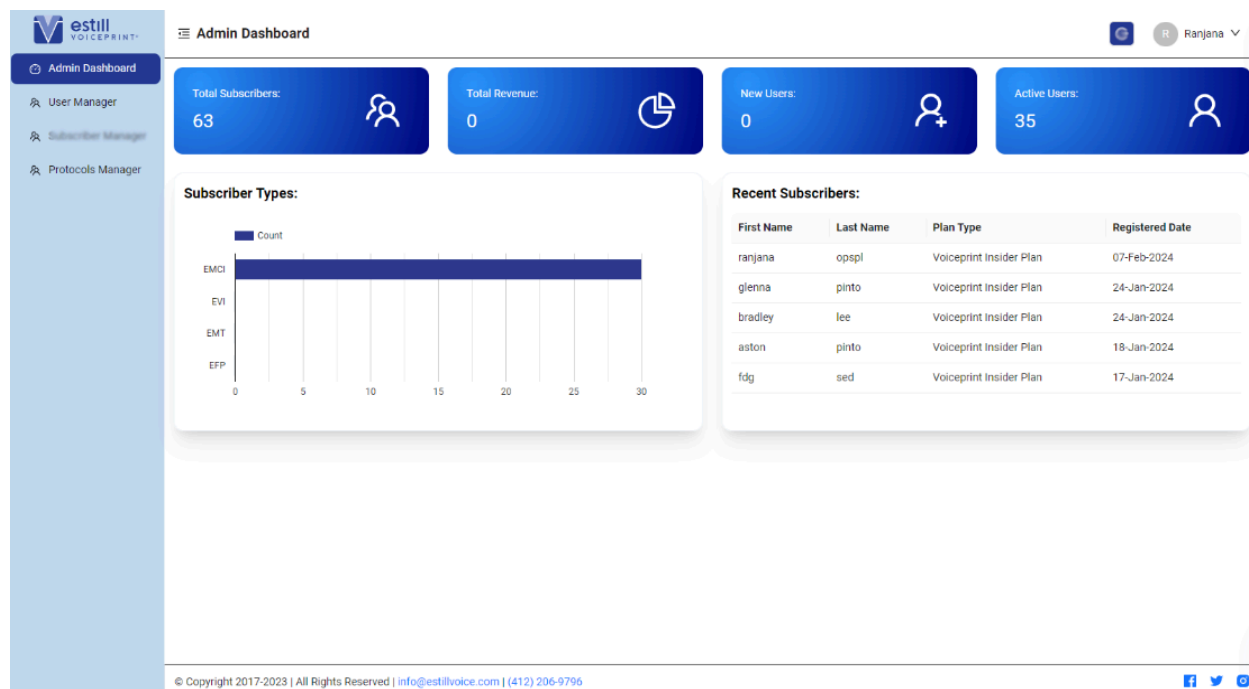
During the internship, for each project, we used a project management tool which had task cards. These task cards were used to take an estimate of the time needed to complete each task. While I aimed to finish within the estimated timeframe, there were some times where I couldn't finish in the estimated timeframe and required extra time.

I learned the importance of communication. I would report if any delays occur from my side to the project guide, explaining the reasons and revising the estimated time as needed. This helped ensure everyone was on the same page and allowed for time adjustments in the project if needed.

Appendix I: Samples of the work done

Estill Voice Project:

Admin Dashboard Page:



Archived Users Page:

User Manager

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#	First Name	Last Name	Email	Role	Archived by
1	fir	sin	test@mailinator.com	Admin	Glenna Pinto
2	trour	test	tour@mailinator.com	Admin	Ranjana Rajeev
3	gf	ghdssgf	gsdfh@mailinator.com	Admin	Ranjana Rajeev
4	df	fdgdf	dkfj@mailinator.com	Admin	Ranjana Rajeev
5	fir	jer	fir@mailinator.com	Admin	Glenna Pinto
6	Emma	Ferns	emma11@mailinator.com	Admin	Glenna Pinto
7	b	f	rt@mailinator.com	Admin	estill voice

1 / 10 / page

Protocol Manager Page:

estill VOICEPRINT

Protocols Manager

Master Template | Examples Manager

Select voice example

Select Label Input Exercise Name Save

- True Vocal Fold Onset/Offset
- False Vocal Fold
- True Vocal Fold Body-Cover
- Thyroid Cartilage
- Estill Siren
- Cricoid Cartilage
- AES
- Larynx
- Velum
- Tongue

Clin-ED Project:

Advisor Signup Page:

Advisor Signup

Home / Advisor Signup

Add Edit Delete Send Print

Search

	Sent	Date	Timings	No. of Spots	Students Enrolled
<input type="checkbox"/>	✓	Apr 23, 2024	12:24 - 22:40	4	Livio
<input type="checkbox"/>	✓	Apr 27, 2024	05:00 - 10:00	5	
<input type="checkbox"/>	✓	Apr 30, 2024	02:00 - 07:00	5	
<input type="checkbox"/>	✓	Apr 30, 2024	06:00 - 16:00	6	tina, raj, mevito, akshay, dhiraaj
<input type="checkbox"/>	✓	May 01, 2024	01:00 - 11:00	5	
<input type="checkbox"/>	✓	May 01, 2024	04:00 - 15:00	8	

Showing 1-6 of 6 items

Previous 1 Next

Student Advisor Signup Page:

The screenshot shows the 'Advisor Signup' page in the Misericordia University system. The left sidebar contains navigation links: Dashboard, Advising, Advisor Signup (selected), Notes, and Notifications. The main content area is titled 'Advisor Signup' and shows a list of available time slots for advisors. The first slot is 'Apr 23, 2024 12:24 - 22:40' with a dropdown menu showing 'Livio'. The second slot is 'Apr 27, 2024 05:00 - 10:00'. The third slot is 'Apr 30, 2024 02:00 - 07:00'. The fourth slot is 'Apr 30, 2024 06:00 - 16:00'. Each slot has a list of numbered fields (1-5) for entering advisor information.

Student Notes Page:

The screenshot shows the 'Notes' page in the Misericordia University system. The left sidebar contains navigation links: Dashboard, Advising, Advisor Signup, Notes (selected), and Notifications. The main content area is titled 'Notes' and shows a table of notes. A modal window titled 'Student Notes' is open, displaying a form for adding a new note. The form includes fields for 'Advisor' (with a dropdown menu showing 'Sam darren'), 'Note' (a text area), 'Advisor/Admin e-sign' (a signature field with a sample signature and the text 'Signed on Jul 27, 2023'), and 'Student e-sign' (a signature field). There are 'Reset' and 'Save' buttons at the bottom of the modal. The background shows a table with columns for 'Note', 'e-sign', and 'Date Signed'. The table has one row with a checkmark in the 'Note' column, 'Sam' in the 'e-sign' column, and a red 'X' in the 'Date Signed' column. The table is showing 1-1 of 1 items.

My Courses Page:

My Courses

Home / My Courses

Search

Course No	Course Name	Section	Type
SLP 325	Stutter/Voice/Cleft Palate	1	SLP Undergraduate
SLP 415	Observation & Clinical Procedures II	1	SLP Undergraduate
SLP 525	Child Language Disorders	2	SLP Graduate
SLP 540	AAC	1	SLP Graduate
SLP 566	Seminar II	1	SLP Graduate
SLP 585	Seminar III	2	SLP Graduate
SLP 590	Dysphagia	1	SLP Graduate
SLP 601	Summer Clinic I	3, 5	SLP Graduate
SLP 602	Summer Clinic II	1, 3	SLP Graduate
SLP 605	Clinic II	2	SLP Graduate
SLP 660	Comps Class	1	SLP Graduate

Showing 1-11 of 11 items

Previous 1 Next

Code Snapshots:

```


<Card className="container-border-custom">
    <Tabs
      bordered
      type="card"
      size={"middle"}
      defaultActiveKey="1"
      items={items}
      className="newTab"
      onChange={handleTabChange}
      tabBarExtraContent={
        <div className="w-full float-end">
          <Input
            className="w-48"
            placeholder={constants.Search}
            onChange={onSearch}
            value={searchValue}
          />
        </div>
      }
    />
  </Card>
</div>


```

```

<div className="mt-2">
  <Table
    className="records-table overflow-auto data_table"
    rowSelectedBg="#e6f4ff"
    columns={StudentNotesCols}
    dataSource={listData}
    rowKey={(record) => record.id}
    bordered
    size="small"
    rowSelection={{
      type: "checkbox",
      ...rowSelection,
      hideSelectAll: true,
    }}
    scroll={{ x: 768 ,y: 'calc(100vh - 350px)'}}
    pagination={{
      pageSize: constants.TablePageSize,
      showTotal: (total, range) =>
        showTotalItems(total, range, listData),
      itemRender: getNextAndPreviousButtons,
    }}
    searchableProps={{ fuzzySearch: true }}
  />
</div>

```

Appendix II: Photos while you are at work

