VIII.2. MEMBERS' CONTRIBUTION

Table 14 - Members efforts during the Sprints

Member	Sprint	Tasks Summary	Total effort
Chuong Pham Dinh (21142643)	1	Support completing the raw content for Project Proposal presentation. Define the main phases for the project.	8h 21m
	2	Scan and collect data from scientific and research papers. Attend interviews with acupuncturists and analyze the interview results.	23h 41m
	3	Redefine functional requirements for the project. Define sources for collecting trusted medical data from recommendations of the acupuncturists. Join Market Research for similar products. Collect data about the meridians.	16h 41m
	4	Collect data about the important acupuncture points and additional acupuncture points. Create Persona representing the shared characteristics from the group of target users.	28h 57m
	5	Review about Git and define Git flow for development. Support research about using Three.js library for 3-D rendering. Set up the relational PostgreSQL database for the project.	11h 03m
	6	Load the finished 3D model into display and set up the basic environment, floor for the viewspace. Used the research result from previous Sprint to load the loading scene to the viewspace. Examine drawing a line connecting the demo acupuncture points into the model.	12h 16m
	7	Support drawing acupuncture points into the model.	11h 56m
	8	Continuously perform UI testing for the first version of Interactive and report bugs to Front-end team. Continue drawing acupuncture points of meridians to the 3D model.	22h 42m
	9	Support drawing acupuncture points of meridians to the 3D model. Design feature test cases for Interactive UI – version 1 and implement the tests, report the bugs to Front-end side for fixing in the next Sprint.	20h 48m
	10	Review and update documentation for finished test cases for Interactive UI – version 1. Design feature test cases for new flows of updated features, including Model interactivities and updated Quiz feature. Continuously perform UI testing for the second version of Interactive UI.	24h 17m

	11	Prepare the content for Midterm Formal Review presentation. Design and document additional feature test cases for Quiz and new model interactions. Implement the feature test cases for Interactive Prototype and UI – Version 2.s	20h 38m
	12	Implement test cases for integrated API flows: Authentication and Domain Knowledge retrieval and updation. Design UI test cases for third enhancement of Interactive UI – Version 2. Implement test cases for Integrated API flows: Quizzes flow.	24h 03m
	13	Implement UI test cases for third enhancement of Interactive UI – Version 2. Design and implement UI test cases for the fourth version of Interactive UI – version 2.	16h 19m
	14	Design UI test cases for Responsive design – Mobile and Tablet. Design UI and feature test cases for Version 3.0 of the final product. Manual testing Version 2.0 of the final product to point out unresolved remaining UI bugs. Implement UI test cases for Responsive Design of the final product – Mobile & Tablet. Implement UI and feature test cases for Version 3.0 of the final product.	37h 11m
	15	Design and handle documents for final submission: Final timeline, Presentation Script, Manual document, Testing plan, Manual testing document. Manual testing live server to make sure the final system is ready for production. Rehearsal for Defense presentation and discuss possible questions to prepare for Defense presentation.	40h 24m
			319h 17m
Nhan Nguyen Cao (21142377)	1	Support completing the raw content for Project Proposal presentation. First step try to contact with client. Draft content for Project Proposal presentation. Define detailed plan for the project (Gantt chart)	19h 53m
	2	Scan and collect data from scientific and research papers. Prepare questions for interviews with acupuncturists. Attend interviews with acupuncturists and analyze the interview results. Define new plans for collecting requirements from new target users.	20h 59m
	3	Modify the Project Proposal document and follow-up items that need to be updated. Discuss with Client about new approach for the project (leaning Research and Development). Join Market Research for similar products and sum up Market Reseach results to report to supervisor.	20h 14m

	4	Collect data about the important acupuncture points and additional acupuncture points. Create Value Proposition Canvas from the empathy interview results with the target users. First step research and find the appropriate 3-D model from the market.	20h 51m
	5	Review about React.js (for Front-end development of the project) with Three.js integrated. Research and report about creating texture in Blender. Add the completed texture to the selected 3D mesh to have the complete model for integration. Do demo projects using Three.js and report to understand techniques for implementation.	20h 55m
	6	Add and modify camera and control effects to the model after loaded into viewspace. Examine drawing acupuncture points of one demo meridian (BL) to the model to understand coordination in Three.js viewspace. Discuss with Dr. Liu and prepare for content to be presented in Informal QR Review presentation.	21h 49m
	7	Set up repositories for the project. Set up Front-end code base for the project. Support setting up deploy server and CI/CD pipeline for both Front-end and Back-end code base of the project. Write script to add data of 14 meridians from spreadsheets to MongoDB database.	14h 42m
	8	Handle the first version of Interactive UI from the Prototype version 1: Authentication pages, Profile pages, Home page, Quiz page, Details page, Advanced search page, Data management page, Personal records page, About page.	25h 11m
	9	Research and perform technical experiments about advanced technique in Three.js, including hovering and clicking effects, camera focus effects and test on the 3D model. Support drawing acupuncture points of meridians to the 3D model. Optimize the rendering of 3D model and items and reduce lag.	18h 01m
	10	Integrate advanced effects to the 3D model: hovering, clicking and camera focus effects. Resolve pending UI bugs reported from Interactive UI – version 1. Implement updates for second version of Interactive UI (all pages and updated features).	21h 01m
	11	Prepare Status Progress Report document for Midterm Review submission. Resolve pending UI and feature bugs existed from Interactive UI – Version 2. Enhance Interactive UI – Version 2 based on feedback from target users and supervisor (Part 1 – Fix pending UI and vision bugs). Improve unit tests coverage for the Front-end side of the project.	20h 31m

	12	Experiment and apply the suggested updates for Interactive UI – Version 2 (to third enhancement). Set up live server for deployment and upgrade the development flow for Staging and Live server. Integrate API calls for Domain Knowledge getting and setting flow and Quizzes flow. Improve test coverage for added API calls in Front-end code base – Part 1.	21h 21m
	13	Experiment and implement the suggested changes for fourth enhancement of Interactive UI – Version 2. Integrate JWT Authorization to private endpoints of the Front-end side of the website. Implement Responsive design for Front-end side of the project – Mobile & Tablet. Write unit tests to cover the API endpoints of the Front-end side of the projet – Part 2 (remaining endponts). Integrate the API calls for upgraded Personal records flow. Research about performing E2E testing in Front-end using Puppeteer.	29h 45m
	14	Implement Version 3.0 for the Website – Fix minor UI bugs and change some controls + Update the user experience flow within the site. Add automation tests to cover Authentication flows and Model control panel flows. Fix the bugs reported from Version 3.0 of the final product.	21h 39m
	15	Update the final Architecture Diagram with technical stack included for final submission. Deploy the final version of Front-end to Live server. Finish the Status Report document for Final submission. Record demo video for the Final product, Mobile & Tablet viewports. Update Technical Testing document for final submission. Export final team members' contribution log from Jira task management platform. Rehearsal for Defense presentation and discuss possible questions to prepare for Defense presentation	44h 45m
			341h 37m
Tan Le Tran Ba (21142355)	1	Support completing the raw content for Project Proposal presentation. Design document's cover template. Create and style the presentation slide for Project Proposal.	29h 27m
	2	Scan and collect data from scientific and research papers. Contact with acupuncturists suggested by Acamedic Affairs to appoint for meetings. Attend interviews with acupuncturists and analyze the interview results.	22h 20m

	3	Report interview results to supervisor. Contact groups of recommended target users from the acupuncturists. Seek for more target users (from acupuncture community). Collect data about the meridians.	24h 24m
	4	Collect data about the important acupuncture points and additional acupuncture points. Sum up the list of requirements for the project based on feedback from supervisor and updates from the Medical University students.	14h 18m
	5	Research for realistic human color tones for skin, and create a skin texture to be added to the 3D mesh. Experiment adding loading scene in Three.js while waiting for the complete model to be loaded.	10h 38m
	6	Start with designing the layout sketch of the screens of the final product. Complete the layout and styling of the presentation slide for the Informal QR Review presentation.	20h 48m
	7	Continue styling detailed design for first version of Prototype, getting feedback from team members and make modifications. Support drawing acupuncture points of some meridians into the 3D model.	21h 39m
	8	Draw acupuncture points of meridians to the 3D model.	5h 02m
	9	Contact the university students to send Interactive UI – version 1 and responsible for managing the feedback. Support drawing acupuncture points of meridians to the 3D model. Summary the feedback for Interactive UI – version 1 and start creating second version of Prototype based on the feedback and updates.	23h 42m
	10	Finalize the second version of Prototype from the feedback and agreed upgrades. Start the first step in setting up and designing the basic layouts for responsive design – mobile devices devices.	16h 35m
	11	Collect feedback from medical university students about the Interactive UI – Version 2. Prepare slide for Midterm Review presentation. Update and redesign assets for Prototype – Version 2 based on feedback collected from supervisor and users. Wrap up responsive design for mobile and tablet.	24h 22m
	12	Update Prototype for third and fourth enhancement of Interactive UI – Version 2. Design sketch layouts and theme of the poster for Final Defense presentation.	19h 58m

	13	Initate design workspace for poster of Final Defense presentation. Send the third enhancement version and clarify pending requests for update to the medical university students. Fix and upgrade the sketch layout for the poster for Final presentation based on feedback of other team members. Prepare the assets for designing the Architecture diagram of the final poster and presentation.	22h 42m
	14	Modify the prototype and design user experience flow for Version 3.0 of the final product. Prepare the draft content for the final presentation slide for the Defense Ceremony – Sections to be included and detailed content. Re-collect feedback from the medical university students for the fixed version of Version 3.0.	27h 50m
	15	Create the final presentation slide for Defense Ceremony. Collect the final feedback from Medical University students and fill up the feedback form. Finish the Prototype document and wrap up assets for Prototype for Portfolio. Wrap up the final poster for Final Defense Ceremony presentation. Sum up and finish the Portfolio with respect to the requirements. Brainstorm about possible questions to be asked during Defense Ceremony presentation. Rehearsal for Defense presentation and discuss possible questions to prepare for Defense presentation	44h 40m
			328h 25m
Trang Ho Ngoc Thao (21142358)	1	Verify the Project Proposal document. Create the script for presenting Project Proposal. Perform initial technical research about libraries for 3-D rendering into browser.	28h 40m
	2	Scan and collect data from scientific and research papers. Attend interviews with acupuncturists and analyze the interview results. Support with preparation for interviews with the acupuncturists.	17h 31m
	3	Research and seek for medical sources from authors suggested by acupuncturists from Medical University bookstores. Prepare survey form to collect requirements from the new group of target users. Join Market Research for similar products	13h 13m
	4	Collect data about the important acupuncture points and additional acupuncture points.	20h 27m
	5	Review about NestJS framework (for Back-end development). Support research and report about Three.js library. Do demo projects using Three.js and report to understand techniques for implementation. Set up MongoDB database for the project.	17h 48m

	6	Research and create demo test to review connecting from NestJS server to MongoDB and PostgreSQL database instances. Support recording demo video for Front-end side. Draft slide content for Informal QR Review presentation.	20h 57m
	7	Set up Back-end code base for the project, with connection mechanism to connect from server to both MongoDB and PostgreSQL databases. Write scripts to integrate data of the collected acupuncture points from spreadsheets to MongoDB database.	22h 22m
	8	Validate the integrated data of meridians and acupuncture points, make modifications to format the documents in storage. Research and integrate authentication flow for the website using Firebase Authentication.	11h 35m
	9	Set up API endpoints for getting information and updating information about the acupuncture points and meridians. Support drawing acupuncture points of meridians to the 3D model.	19h 38m
	10	Set up API endpoints for authentication flow and getting, updating account information. Manual testing all the finished API endpoints.	16h 16m
	11	Prepare speech content for Midterm Review presentation. Summary the feedback collected from the medical university students and the supervisor for Interactive UI – Version 2. Continue developing the Back-end server: Set up API endpoints for storing quiz results and personal records storing and retrieval.	22h 34m
	12	Fix CD flow for Back-end, following the change from deployment server (Vercel to Heroku). Research about applying JWT authorization to API endpoints within the project. Check for corner cases and improve condition checking for finished API endpoints. Integrate JWT authorization flow for existing API endpoints (Back-end side). Handle the API endpoints for upgraded Personal Records flow (with learning streak added).	22h 23m
	13	Research about writing unit tests in Nest.js. Implement unit tests for the Authentication endpoints and Profile endpoints (Back-end).	21h 04m
	14	Write unit tests cover the controllers and services of the final product – Domain Knowledge + Quizzes + Personal records flows.	22h 31m
	15	Set up the folder structure for Portfolio to match with the requirements. Create index file for Portfolio to navigate to all included sections and documents. Fresh the Back-end side of server and database instance to be ready for production. Finish the Technical Specification	44h 53m

		document for Final submission. Record demo video for the Final product, Desktop viewport. Wrap up all Sprint reports and fill the unfinished documents with the final effort log. Rehearsal for Defense presentation and discuss possible questions to prepare for Defense presentation	
			321h 52m