AUT
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COMP704 Research and Development Project

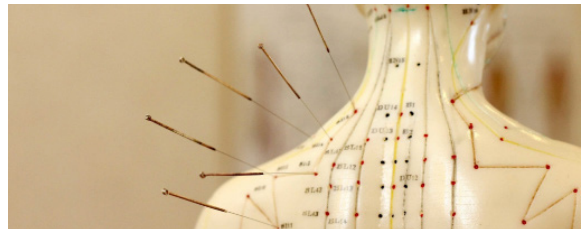**VN01** **3D acupuncture healthcare data management and treatment system**

Sprint Planning

Client:	Dr William Liu
Supervisor:	Dr Nhan Le Thi
Team Members:	21142643 Chuong Pham Dinh
	21142377 Nhan Nguyen Cao
	21142355 Tan Le Tran Ba
	21142358 Trang Ho Ngoc Thao
Version:	1.0
Date:	11th December 2022
Sprint:	Sprint 5 - Upskilling 1

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DOCUMENT VERSION CONTROL

1. DOCUMENT INFORMATION

Document code	**S5**
Document title	**Sprint Planning – Sprint 5: Upskilling 1**
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2. DOCUMENT SIGN-OFF

ID	Member	Role	Signature	Timestamp
21142355	Tan Le Tran Ba	Project Manager		11 Dec 2022 16:19

3. DOCUMENT VERSIONS

Version	Timestamp	Description	Responsible members
1.0	11 Dec 2022 09:47	Initial plan for the Sprint	**Nhan Nguyen Cao** *(21142377)*

I. SPRINT OBJECTIVE

- Learn the basic skillsets for using new library to render 3D into browser, Three.js library.
- Practice technical skills: Git flow skills and review skills related to required tech stack (React.js and Nest.js).
- Add texture of realistic skin color to the selected 3D model for putting into the product.
- Do some demo projects to practice different techniques within the library of Three.js, on React.js-based project.

II. SPRINT DETAILS

1. SPRINT TIMELINE

Timeline: 12 Dec 2022 – 25 Dec 2022

Duration: 2 weeks

Table 1 - Sprint timeline

Week	Timeline	Detail
1	12 Dec 2022 – 18 Dec 2022	Review and upskill using some basic ground selected frameworks and libraries: React.js, Nest.js. Learn basic technique about Blender to create realistic skin texture for the selected 3D model. Review the documentation of Three.js library to acquire some basic understandings.
2	19 Dec 2022 – 25 Dec 2022	Add the created skin texture to the 3D model and evaluate appropriate color tones. Do some demo projects with Three.js library to understand different techniques and skills sets.

2. TEAM VELOCITY

Table 2 - Team Velocity for the Sprint (unit: hours)

Day of week	Nhan Nguyen Cao (21142377)	Tan Le Tran Ba (21142355)	Trang Ho Ngoc Thao (21142358)	Chuong Pham Dinh (21142643)	Total
Mon	2	0	1	1.5	4.5
Tue	2	1.5	0	2	5.5
Wed	2	2	1	1.5	6.5
Thu	2	3	1	1.5	7.5
Fri	2	1	1	1.5	5.5
Sat	0	3	4	2	9
Sun	2	1.5	4	2	9.5
Total	12	12	12	12	48

3. BACKLOG ITEMS

Table 3 - Backlog items

Item ID	Item description	Story points	Estimated effort (h)	Notes
1	Review about Git and Github	2	6	
2	Define the appropriate Git flow to be used for the project	1	3	
3	Review about Nest.js framework	2	6	
4	Review about React.js library	2	6	
5	Research about creating texture in Blender	2	6	
6	Acquire the appropriate color tones for realistic human skin color	1	3	
7	Create the skin color texture for the selected 3D model	3	6	
8	Add the texture to the 3D model and evaluate the color tones	1	6	
9	Research – Initialize a Three.js project (dependently and integrated to React.js project)	2	7	
10	Research – Load existing 3D model to the site with Three.js	2	6	
11	Research – Render text and line in Three.js	2	6	
12	Do demo project with Three.js – Color geometric floor	2	6	
13	Do demo project with Three.js – Globe and universe	3	6	
14	Do demo project with Three.js – Car racing	3	8	
15	Set up databases (main and staging) for the project using MongoDB	2	6	
16	Set up databases (main and staging) for the project using PostgreSQL	2	6	
17	Experiment loading scene when displaying model into browser with Three.js library	1	3	
Total	**17 tasks**	**33**	**96**	

4. SPRINT INPUTS

- Experience with developing a complete full-stack project using React.js and Nest.js
- Selected base 3D model (without texture) acquired during the previous Sprints.
- Selection of hosting server for main and staging databases for the project.
- Basic understanding and experience using Git for flow during the implementation of technical project

5. SPRINT OUTPUTS

- Defined Git flow for implementation of the project.
- Texture of realistic human skin color, integrated successfully to the selected 3D model of the project.
- Skill sets and experience of using Three.js library to render 3D into browser, and related techniques.
- Demo projects for implementing different techniques using Three.js library.
- Main and staging database servers for the project set up successfully.

III. SPRINT DETAILS

Table 4 - Sprint details

Task ID	Task name	Story points	Estimated effort (h)	Assignee
1	Review about Git and Github	2	6	Chuong Pham Dinh
2	Define the appropriate Git flow to be used for the project	1	3	Chuong Pham Dinh
3	Review about Nest.js framework	2	6	Trang Ho Ngoc Thao
4	Review about React.js library	2	6	Nhan Nguyen Cao
5	Research about creating texture in Blender	2	6	Nhan Nguyen Cao
6	Acquire the appropriate color tones for realistic human skin color	1	3	Tan Le Tran Ba
7	Create the skin color texture for the selected 3D model	3	6	Tan Le Tran Ba
8	Add the texture to the 3D model and evaluate the color tones	1	6	Nhan Nguyen Cao
9	Research – Initialize a Three.js project (dependently and integrated to React.js project)	2	7	Nhan Nguyen Cao
10	Research – Load existing 3D model to the site with Three.js	2	6	Trang Ho Ngoc Thao
11	Research – Render text and line in Three.js	2	6	Chuong Pham Dinh
12	Do demo project with Three.js – Color geometric floor	2	6	Trang Ho Ngoc Thao
13	Do demo project with Three.js – Globe and universe	3	6	Nhan Nguyen Cao
14	Do demo project with Three.js – Car racing	3	8	Nhan Nguyen Cao
15	Set up databases (main and staging) for the project using MongoDB	2	6	Trang Ho Ngoc Thao
16	Set up databases (main and staging) for the project using PostgreSQL	2	6	Chuong Pham Dinh
17	Experiment loading scene when displaying model into browser with Three.js library	1	3	Tan Le Tran Ba
Total	**17 tasks**	**33**	**96**	