Project Management Plan

Sustainable Work through Women-in-tech Application for Older Women in Malaysia and Thailand: Integrating Action Research and Design Science Approach

Project Wide Vision Statement

With the progression of time and advancements in technology, the new generation is becoming particularly tech-savvy and leading the way for more evolution of the current technologies as well as investigating new areas in the hi-tech industry. This in turn, leaves the seniors of this generation struggling to keep up and on top of their game with these developments.

It has been observed that a substantial population of older women in ASEAN countries are illiterate, financially insecure and less digital savvy than average. Therefore, this project aims to create the bridge between older women and the new technological era in order to help discover new interests and support existing ones by providing learning materials based on their interests, background and other relevant information gathered in hope of helping them live independently within their community.

This vision will be applied through a web application that acts as a medium for connecting older women in ASEAN countries with similar interests; furthermore, learn about the user over time and offer fitting recommendations relating to their interests. The application will be kept simple and neat to cater for all user capabilities.

Unlike other softwares, our application is designed to cater for older women in ASEAN countries, specifically those who are not very accustomed to using technology. Together with the various ways of interacting with the users and learning about their needs and wants, our application would be user friendly to those who lack experience in using technology.

Stakeholders

- Prof. Dr Teh Pei Lee (main stakeholder, School of Business)
- A/P Dr. Manjeevan Singh (School of Business)
- Dr Ewilly Liew (School of Business)
- Ying Lu - Data Scientist (Google Inc)
- End User (Older Women)
- Assignees (phd students)

Team Management

Name	StudentID	Assigned Role	Email
Team RedCow			
Vladislav Pikulin	30935679	Product Owner	vpik0001@student.monash.edu
Arissha Yasmin Redzuan	30770726	Release Train Engineer/Scrum Master	ared0005@student.monash.edu
Daiki Kubo	30523346	Product Manager	dkub0001@student.monash.edu
Tatiana Sutulova	30806151	System Architect	tsut0005@student.monash.edu
Elaf Abdullah Saleh Alhaddad	31063977	Release Train Engineer	ealh0002@student.monash.edu
Team 404			
Kelvin Kong Kai Wen	30861586	Product Manager	kkon0010@student.monash.edu
Morad Abou Shadi	29799260	Release Train Engineer/Scrum Master	mabo0003@student.monash.edu
Ti Jia Yao	29276160	Release Train Engineer	jtii0001@student.monash.edu
Chia Yong Peng	29938120	Product Owner	ychi0014@student.monash.edu
Daniel Yuen Hao Xian	30519357	System Architect	dyue0003@student.monash.edu

Team twenty9			
Sim Mon Kiat Jeffrey	29543770	Release Train Engineer	msim0015@student.monash.edu
Ng Guo Hao	29799392	Product Owner	gngg0006@student.monash.edu
Dilshan Jayasinghe	29344352	Release Train Engineer	djay0008@student.monash.edu
Jasmine Chen Miin Huey	29938023	System Architect	jche0155@student.monash.edu
Lau Yi Meng	29274559	Product Manager	ylau0009@student.monash.edu
Mohamed Hijan Hameez	28627237	System Architect	mham0009@student.monash.edu

Process Information

The software process framework used in this project is Essential Scaled Agile Framework. It is a simpler version of the Scaled Agile Framework. There are 3 essential teams in the framework, i.e. Project Management team, Software Architect team and Release Train Engineers (RTEs).

This project has three small Agile teams working on it, with each team comprising 4-5 members which uses Scrum methodology to deliver features during iterations. We have modified the framework to allow roles to be assigned on a team level rather than at the project level. Each team will have a Software Architect, Project Manager, RTE and a Product Owner. A scrum master is also assigned during sprints in order to maintain the sprint. Each team's relevant member assigned to a role will collectively form the 3 essential teams of the project mentioned above.

Project Management Team will be in charge of the deliverables based on the clients expectations and beliefs. They will liaison with the clients and decide which features and functionalities are to be delivered by the end of the project. The Software Architect team will decide upon solution architectures, software frameworks, coding languages etc that will ensure every member follows the same guidelines and rules during development of functions and allow for smooth integration between teams during increments. RTE team will ensure smooth integration and git workflow during iterations.

At the end of each iteration there will be a short demo of the product with the clients before moving on to the next iteration.

Project Timeline

1st Program Increment (PI) (28th March - 16th April)

Team RedCow

1. Develop User Interface for Login page
2. Enable user to login using phone number
3. Authenticate login with an authenticated sms (user does not need to remember password)

Team twenty9

1. Plan out and implement user interface for recommender page
2. Enable smooth transition between chatbox and recommender pages

Team 404

1. Develop Chatbot user interface
2. Implement a basic chat box with test questions.

Future Incrementals

For PI 2, under the Forum section, we plan to develop a UI for the forum page and allow simple commits of posts with interests, comments and likes/dislikes. For recommendations, implement gathering preferences from users and build the content library. Chatbot will replace test questions with a set of questions determined by the client, have better surveying of first time users and handle user queries.

A detailed breakdown of Project Timeline is available in the PI roadmap document.

Policies to keep everyone informed

Communication

- **WhatsApp**
    - A Main project group. All employees of the project discuss and review aspects of the project.
    - Team groups. Each team has their own group in which they use to communicate with each other for task delegation, reminders etc…
    - All team members must respond to any messages sent no later than the morning of the next day the message was sent.
- **Zoom**
    - Team / Project Zoom meetings where the required attendees are defined by the scope of the meeting.
    - Client / Stakeholder meetings.

    - Meeting minutes must be recorded collectively by the members, for future reference.
    - If needed, zoom meetings should be recorded as well for future reference.
- **E-mail**
    - Used for reaching out to stakeholders and project supervisors. If further clarification is needed, a zoom meeting will be held to elucidate our inquiries.

Repository Management Policies

Subject	Description	If violated
Commit	Only merge to the main branch when a user story or feature has been completed or updated	RTE contacts that team member to reverse the merge
Commit	Add lightweight tags on commits that introduce bugs or unexpected behaviour	RTE adds the lightweight tags
Commit	Make stable version of the software using annotated tags	RTE adds the annotated tag
Commit	Ensure that each commit has message with format discussed	Committer changes the commit message using the --amend command and force pushes it as soon as possible
Branch	Name branches using the naming format discussed	Branch creator renames the branch
Branch	Only give permission(push/merge) of a branch to related developers	Maintainer removes permission(push/merge) of unrelated developers
Branch	Each branch should only be responsible for one feature	Team creates a new branch and transfer the codes for the new feature to that branch
Branch	Only create branch under the circumstances discussed	RTE removes the branch created
Merge Request	Merge requests must be tested with predetermined jobs and reviewed	RTE reverts the merge request

Stakeholder Interests and Expectations

Stakeholder	Interest	Influence	Explanation
Prof. Dr Teh Pei Lee (main stakeholder, School of Business)	High	High	These stakeholders are the main contributor of requirements with the clearest vision of the overall needs and wants from this project. Also, these stakeholders actively engage with the product owners/managers and are consulted regularly when uncertainties or negotiating matters arise.
A/P Dr. Manjeevan Singh (School of Business)	High	High	
Dr Ewilly Liew (School of Business)	High	High	
Ying Lu - Data Scientist (Google Inc)	High	Low	One of the main stakeholders with direct interest in the project as they review the chatbot questions and ensure its eligibility, aside this, not as active and reachable as other stakeholders. May guide in the implementation data analytics section during and after completion of the project.
Assignees (phd students)	Low	Low	Low interest and low influence as the assignees do not actively contribute to the requirements of the project and do not make influential decisions within the project.
Dr Chong Chun Yong	High	Medium	Has a high interest because he oversees the teams involved in the project and ensures each team functions adequate to deliver the final product. Moderate influence because Dr Chong acts as a moderator between the team and the main stakeholders. He does not directly get involved in the product's design and

			implementation, instead reviews and advises on matters related to the development of the product.

End of Project Deliverables

- A software application that:
    - Is easy to use and has a simple layout to accommodate for non tech savvy users.
    - Easy login system - user is able to register using their mobile number.
    - Uses a web-based chat box which asks simple questions from elderly women in order to provide them with learning materials.
    - Gathers information about the users and stores in a database for more accurate recommendations and future research purposes.
    - Recommends the user with learning materials based on their interests.
    - Has a forum to allow for the older women to share and communicate their interests.
    - An admin dashboard for product owners to perform analytics on the users' engagement and interaction
    - Assigns open ended questions from the chatbox to a phd student and allows them to provide a response to the user.

PI Planning Session Methodology

Project managers

Project managers determine, based on the requirements of the client, which features should be worked on during this incremental phase. They are responsible for ensuring that each Agile team has prepared their program backlog and iteration goals for the first iteration and that those deliverables decided are completed at the end of the iteration.

System Architects

Responsible for researching and identifying the potential system architectures to be applied in the making of the application along with its advantages, disadvantages, key risks and unknowns. They are also responsible for communicating these potential architectures to the project members before finally deciding on the best possible architecture.

Release Train Engineers

Produce the agenda for the PI planning session and inform project members of the agenda in order to prepare for the meeting. Facilitate Project Managers and Software Architects to explain their work during the session. After the session, produce the necessary documents for the first iteration. The documents are Project Management Plan, Quality Assurance Plan, Risk Register. Moreover they are responsible for implementing a project wide time tracking system and a plan for managing the Git Workflow.

Agenda for the first PI planning meeting held on the 26th March 2021.

No	Agenda item	Responsible Team	Purpose	Estimation time (min)
1	Business context	PM	Present vision statement	5
2	Product/ solution vision	PM	Presents the top features that should include on current PI planning	5
3	Architecture vision and development practices	SA	● Present finalised architecture designs ● Present the options for undecided architecture decisions with the pros and cons for each. ● Take a vote on remaining architecture decisions.(Everyone)	10
4.	Non-functional requirements and accessibility	PM	Presents the non functional requirements that are important for this application	5
5	Team Breakouts	All Teams	● Estimate team's capacity, identify the top backlog items to be include in current PI ● Identify risks and dependencies ● Draft initial PI objectives	10
6	Draft plan review	All teams	● Present key planning outputs from team breakout session ● Review on each team's outputs and finalise it	10
7	Confidence vote	All teams	Teams vote on the agreement for the current plan	5
8	Documentation Planning (RTEs)	RTE	● Plan out on how to go about the documents ● Who does which document ● Get a start on the documents	~