



**International School**

## **Capstone Project 2**

**CMU-SE 451 – C2SE.12**

### **Project Plan**

**Version 1.1**

**Date: March 20<sup>th</sup>, 2021**

## **Learn English Together**

**Submitted by**

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**Approved by**

**MSc Huy, Truong Dinh**

**Proposal Review Panel Representative:**

Name	Signature	Date
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**Capstone Project 2- Mentor:**

Name	Signature	Date
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## PROJECT INFORMATION

<b>Project acronym</b>	LET		
<b>Project Title</b>	Learn English Together		
<b>Start Date</b>	26 Feb 2021	<b>End Date</b>	08 Jun 2021
<b>Lead Institution</b>	International School, Duy Tan University		
<b>Project Mentor</b>	MSc Huy, Truong Dinh		
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<b>Partner Organization</b>	Duy Tan University		
<b>Project Web URL</b>			
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## DOCUMENT APPROVALS

The following signatures are required for approval of this document.

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## DOCUMENT NAME

<b>Document Title</b>	Project Plan Document		
<b>Author(s)</b>	H2MT Team		
<b>Role</b>	Product Owner, Team Member, Scrum Master		
<b>Date</b>	March 16 <sup>th</sup> , 2021	<b>File name:</b>	C2SE.12_ProjectPlan_LET_ver1.0.doc

## REVISION HISTORY

Version	Person(s)	Date	Description
1.0	Le Thanh Ha	16-Mar-2021	Create Project plan document
1.1	Le Thanh Ha	20-Mar-2021	Fix Project plan document

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Introduction:

### 1.1. Purpose:

This document provides a summary of the project's objectives, division of work, the major milestones, required resources, time and overall schedule and budget allocation used and based on the document proposal to build a dating website application on time, at the request and plan.

### 1.2. Project Overview:

- Reference to C2SE.12\_Proposal\_LET\_ver1.2.docx

### 1.3. Project Deliverable:

- The project will be implemented for users such as admin, manager, teacher, alumni, and student.

## 2. Team Organization:

### 2.1. Scrum Team Information:

*Table 1: Scrum Team Organization.*

Full Name	Phone	Email	Position
MSc Huy, Truong Dinh	0982132352	truongdinhhuy@dtu.edu.vn	Mentor
Ha, Le Thanh	0334002818	lethanhhadtu@gmail.com	Scrum Master
Hieu, Le Xuan	0399706614	xuanhieu.le.1999@gmail.com	Member
My, Ngo Ngoc	0764497391	ngongocmy851999@gmail.com	Member
Thong, Doan Trung	0886428208	doanthong002@gmail.com	Member

## 2.2. Role and Responsibility:

**Table 2: Role and Responsibilities.**

<b>Role</b>	<b>Responsibility</b>	<b>Name/Title</b>
<b>Product Owner</b>	<ul style="list-style-type: none"> <li>- Understand the user and customers with their needs.</li> <li>- Collaborate with the development team.</li> <li>- Manage the stakeholders.</li> <li>- Describe the user experience and product features.</li> <li>- Provides detail user stories.</li> </ul>	Duy Tan University
<b>Scrum Master</b>	<ul style="list-style-type: none"> <li>- Communicate the value of Scrum</li> <li>- Teach the organization on Scrum to maximize business value</li> <li>- Attend all Scrum meetings</li> <li>- Preserve the integrity and spirit of the Scrum framework</li> <li>- Maintain the focus of the Team</li> <li>- Make the Team aware of impediments and facilitate efforts to resolve them</li> <li>- Serve as a coach and mentor to members of the Team</li> <li>- Respectfully hold the Team, Product Owner and Stakeholders accountable for their commitments</li> <li>- Continually work with the Team and business to find and implement improvements</li> </ul>	Ha, Le Thanh
<b>Secretary</b>	<ul style="list-style-type: none"> <li>- Record the content of group meetings and activities of the member</li> </ul>	Hieu, Le Xuan
<b>Reviewer</b>	<ul style="list-style-type: none"> <li>- Review documents</li> </ul>	All Members
<b>Developer</b>	<ul style="list-style-type: none"> <li>- Analysis of the functions and requirements of the product.</li> <li>- Code and test.</li> <li>- Fix error.</li> </ul>	All Members
<b>Analyzer</b>	<ul style="list-style-type: none"> <li>- Gather user stories.</li> <li>- Analysis user story to do specify Document.</li> </ul>	All Members
<b>Tester</b>	<ul style="list-style-type: none"> <li>- Do the Test plan</li> </ul>	All Members

	<ul style="list-style-type: none"> <li>- Creation of test designs, test processes, test cases and test data.</li> <li>- Carry out testing as per the defined procedures.</li> <li>- Graph the results and make sure people know when test results decline.</li> <li>- Prepare all reports related to software testing carried out.</li> <li>- Analysis and evaluate the Test result.</li> <li>- Ensure that all tested related work is carried out as per the defined standards and procedures.</li> </ul>	
<b>Mentor</b>	<ul style="list-style-type: none"> <li>- Guide on the process.</li> <li>- Monitoring all activities of Team.</li> <li>- Help with anything.</li> </ul>	MSc Huy, Truong Dinh

### 2.3. Communication Methodology:

*Table 3: Communication Methodology.*

<b>Audience/ Attendees</b>	<b>Topic/ Deliverable</b>	<b>Frequency</b>	<b>Method</b>
<b>Mentor and Team member</b>	Project Progress Review	Weekly	Meeting, Email, Zalo
<b>Team Member</b>	Project Progress Review and Daily Meeting	Daily	Trello, GitHub, Zoom

### 2.4. Communication and Report:

*Table 4: Communication and Report.*

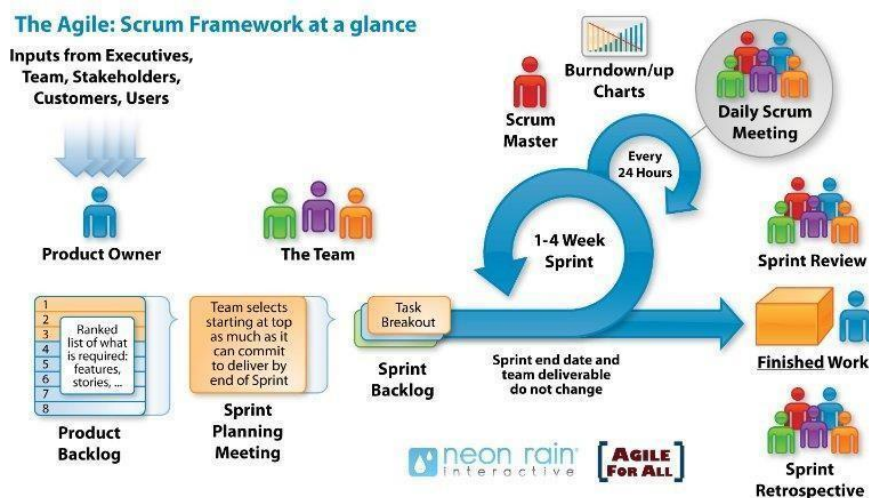
<b>Type of communication</b>	<b>Methods, tools</b>	<b>Frequency</b>	<b>Information</b>	<b>People</b>
<b>Communication among in group</b>				
<b>Scrum meeting</b>	Face to face or Hangouts	Every two day	Informed about what was done in the last 24 hours, working on plans for today, the difficulties encountered and the solutions required, just meeting 10-15 minutes.	Project team



<b>Sprint Planning Meeting</b>	Meet face to face	15-20 days	All members in team together to analyze the requirements, functions, working on the sprint going to do, planning and design for the sprint.	Project team
<b>Retrospective meeting</b>	Meet face to face	15-20 days	Complete documentation. For each stage, sharing materials, given the strengths and weaknesses for each. Period for each member and the solution calculated measurement project.	Project team and Mentor
<b>Demo</b>	Meeting online	Every day	A web-based task tracking system. To manage or divide task, report bugs/issues.	Project team.

### 3. Development Process:

#### Scrum Process



- Scrum is an iterative and incremental agile software development framework for managing software projects and product or application development.
- Scrum focuses on project management institutions where it is difficult to plan.
- Mechanisms of empirical process control, where feedback loops that constitute the core management technique are used as opposed to traditional command-and-control management.
- Its approach to planning and managing projects is by bringing decision-making authority to the level of operation properties and certainties.

Benefit of the methodology:

- Project can respond easily to change.
- Problems are identified early.
- Customers get the most beneficial work first.
- Work done will better meet the customer's needs.
- Improved productivity.
- Ability to maintain a predictable schedule for delivery.

#### 4. Schedule and Cost:

##### 4.1. Detailed Schedule:

No.	Task Name	Start	Finish	Effort
<b>1</b>	<b>Initial</b>	<b>26/02</b>	<b>06/03</b>	<b>21 hrs</b>
<b>1.1</b>	<b>Gathering Requirement</b>	<b>26/02</b>	<b>28/03</b>	<b>8 hrs</b>
1.1.1	Get requirement from Mentor MSc Huy Truong Dinh	26/02	27/02	2 hrs
1.1.2	Analyzing requirement	27/02	28/02	6 hrs
<b>1.2</b>	<b>Create Proposal Document</b>	<b>01/03</b>	<b>06/03</b>	<b>16 hrs</b>
1.2.1	Product Definition	01/03	02/03	3 hrs
1.2.2	Business Need	02/03	03/03	2 hrs

1.2.3	Prior Art	03/03	04/03	3 hrs
1.2.4	Proposed Solution	04/03	05/03	3 hrs
1.2.5	Master Plan	05/03	06/03	5 hrs
<b>2</b>	<b>Start Up</b>	<b>07/03</b>	<b>14/03</b>	<b>44 hrs</b>
2.1	Project kick-off	07/03	08/03	2 hrs
<b>2.2</b>	<b>Create Document</b>	<b>08/03</b>	<b>14/03</b>	<b>42 hrs</b>
2.2.1	Project's Meeting	08/03	08/03	3 hrs
2.2.2	Create User Stories	09/03	09/03	6 hrs
2.2.3	Create Product Backlog	10/03	10/03	10 hrs
2.2.4	Review Document	11/03	11/03	5 hrs
2.2.5	Create Project Plan	12/03	12/03	8 hrs
2.2.6	Create Architecture Design Document	13/03	13/03	8 hrs
2.2.7	Review Document	14/03	14/03	2 hrs
<b>3</b>	<b>Development</b>			
<b>3.1</b>	<b>Sprint 1</b>	<b>15/03</b>	<b>12/04</b>	<b>103 hrs</b>
3.1.1	Sprint Planning Meeting	15/03	15/03	4 hrs
3.1.2	Create Sprint Backlog	15/03	15/03	2 hrs
3.1.3	Create Test Plan document for Sprint 1	16/03	16/03	2 hrs
3.1.4	Create Database document for Sprint 1	16/03	16/03	2 hrs
<b>3.1.5</b>	<b>Design</b>	<b>17/03</b>	<b>25/03</b>	<b>21 hrs</b>
3.1.5.1	Design interface of Home Page	17/03	18/03	5 hrs

3.1.5.2	Design interface of Register	18/03	18/03	4 hrs
3.1.5.3	Design interface of Login	18/03	18/03	4 hrs
3.1.5.4	Design interface of profile	19/03	19/03	4 hrs
3.1.5.5	Design interface of chat room group	20/03	20/03	4 hrs
3.1.5.6	Design interface of list group	21/03	21/03	4 hrs
3.1.5.7	Design interface of member group	22/03	22/03	4 hrs
3.1.5.8	Design interface of call video group	23/03	23/03	4 hrs
3.1.5.9	Design interface of record group	24/03	24/03	4 hrs
3.1.5.10	Design interface of message	25/03	25/03	4 hrs
<b>3.1.6</b>	<b>Coding</b>	<b>26/03</b>	<b>09/04</b>	<b>58 hrs</b>
3.1.6.1	Code Main Menu for users	26/03	28/03	16 hrs
3.1.6.2	Code Login for users	29/03	30/03	4 hrs
3.1.6.3	Code Register for users	30/03	31/03	4 hrs
3.1.6.4	Code Profile for users	01/04	02/04	10 hrs
3.1.6.5	Code Group for users	03/04	06/04	10 hrs
3.1.6.6	Code Message	07/04	09/04	10 hrs
<b>3.1.7</b>	<b>Testing &amp; Fix Bug</b>	<b>09/04</b>	<b>11/04</b>	<b>10 hrs</b>
3.1.7.1	Test Main Menu	09/04	09/04	2 hrs
3.1.7.2	Test Login	09/04	09/04	2 hrs

3.1.7.3	Test Register	10/04	10/04	2 hrs
3.1.7.4	Test profile	10/04	10/04	4 hrs
3.1.7.5	Test group	11/04	11/04	4 hrs
3.1.7.6	Test message	11/04	11/04	4 hrs
<b>3.1.8</b>	<b>Release Sprint 1</b>	<b>11/04</b>	<b>12/04</b>	<b>4 hrs</b>
3.1.8.1	Sprint 1 Review Meeting	11/04	11/04	2 hrs
3.1.8.2	Sprint 1 Retrospective	12/04	12/04	2 hrs
<b>3.2</b>	<b>Sprint 2</b>	<b>13/04</b>	<b>10/05</b>	<b>185 hrs</b>
3.2.1	Sprint Planning Meeting	13/04	13/04	4 hrs
3.2.2	Create Sprint Backlog	13/04	13/04	2 hrs
3.2.3	Create Test Plan document for Sprint 2	14/04	14/04	2 hrs
3.2.4	Create Database document for Sprint 2	14/04	14/04	2 hrs
<b>3.2.5</b>	<b>Design</b>	<b>15/04</b>	<b>20/04</b>	<b>40 hrs</b>
3.2.5.1	Design user interface of Find a helper	15/04	16/04	8 hrs
3.2.5.2	Design user interface of Support for user	16/04	17/04	8 hrs
3.2.5.3	Design user interface of Search user	17/04	18/04	8 hrs
3.2.5.4	Design user interface of Learn Vocabulary	18/04	19/04	8 hrs
3.2.5.5	Design user interface of Quiz	19/04	20/04	8 hrs
<b>3.2.6</b>	<b>Coding</b>	<b>20/04</b>	<b>06/05</b>	<b>99 hrs</b>
3.2.6.1	Code Find a helper	20/04	21/04	18 hrs
3.2.6.2	Code Support for user	21/04	23/04	18 hrs
3.2.6.3	Code Search	24/04	26/04	16 hrs

3.2.6.4	Code Learn Vocabulary	27/04	02/05	25 hrs
3.2.6.5	Code Quiz	03/05	06/05	22 hrs
<b>3.2.7</b>	<b>Testing &amp; Fix Bug</b>	<b>07/05</b>	<b>08/05</b>	<b>32 hrs</b>
3.2.7.1	Test Find a helper	07/05	07/05	8 hrs
3.2.7.2	Test Support for user	07/05	07/05	5 hrs
3.2.7.3	Test Case for Search	08/05	08/05	5 hrs
3.2.7.4	Test Learn Vocabulary	08/05	08/05	7 hrs
3.2.7.5	Test Quiz	08/05	08/05	7 hrs
<b>3.2.8</b>	<b>Release Sprint 2</b>	<b>09/05</b>	<b>10/05</b>	<b>4 hrs</b>
3.2.8.1	Sprint 2 Review Meeting	09/05	09/05	2 hrs
3.2.8.2	Sprint 2 Retrospective	10/05	10/05	2 hrs
<b>3.3</b>	<b>Sprint 3</b>	<b>11/05</b>	<b>01/06</b>	<b>119 hrs</b>
3.3.1	Sprint Planning Meeting	11/05	11/05	4 hrs
3.3.2	Create Sprint Backlog	11/05	11/05	2 hrs
3.3.3	Create Test Plan document for Sprint 3	12/05	12/05	2 hrs
3.3.4	Create Database document for Sprint 3	12/05	12/05	2 hrs
<b>3.3.5</b>	<b>Design</b>	<b>13/05</b>	<b>17/05</b>	<b>30 hrs</b>
3.3.5.1	Design interface of Dashboard	13/05	14/05	8 hrs
3.3.5.2	Design interface of Manager account	14/05	15/05	5 hrs
3.3.5.3	Design interface of Admin	15/05	16/05	10 hrs
3.3.5.4	Design interface of Event	16/05	17/05	7 hrs
<b>3.3.6</b>	<b>Coding</b>	<b>18/05</b>	<b>28/05</b>	<b>59 hrs</b>
3.3.6.1	Code Dashboard	18/05	20/05	12 hrs
3.3.6.2	Code Admin	21/05	23/05	15 hrs

3.3.6.3	Code Manager account	23/05	25/05	22 hrs
3.3.6.4	Code Event	26/05	28/05	10 hrs
<b>3.3.5</b>	<b>Testing &amp; fix Bug</b>	<b>29/05</b>	<b>30/05</b>	<b>16 hrs</b>
3.3.7.1	Test Dashboard	29/05	29/05	4 hrs
3.3.7.2	Test Admin	29/05	29/05	4 hrs
3.3.7.3	Test Manager account	30/05	30/05	4 hrs
3.3.7.4	Test Event	30/05	30/05	4 hrs
<b>3.3.6</b>	<b>Release Sprint 3</b>	<b>31/05</b>	<b>01/06</b>	<b>4 hrs</b>
3.3.6.1	Sprint 3 Review Meeting	31/05	31/05	2 hrs
3.3.6.2	Sprint 3 Retrospective	01/06	01/06	2 hrs

**Table 5: Detailed Schedule.**

**4.2. Cost****4.2.1. Cost Person/Hours**

Full Name	Role	Salary Rate (USD/hour)
Ha, Le Thanh	Scrum Master	2
Hieu, Le Xuan	Team Member	2
My, Ngo Ngoc	Team Member	2
Thong, Doan Trung	Team Member	2

*Table 1. Cost person/hours***4.2.2. Total Cost Estimate**

No	Criteria	Price	Total (USD)
1	Working hours	2	2700
2	Other cost	100	400
			3100

*Table 2. Total cost estimation*

Description	Amount	Unit
Number of members	4	Person
Number of working hours per day	3	Hours
The cost per hour per member	2	USD
The number of working days	90	Days

- The explanation for the table:

- Amount of working hours = 4 members \* 3 hours \* 90 days
- Other cost = 4 members \* 100 USD



## 5. Project Risk:

*Table 7: Rating for likelihood and seriousness for each risk.*

RATING FOR LIKELIHOOD AND SERIOUSNESS FOR EACH RISK			
<b>L</b>	Rated as Low	<b>E</b>	Rated as Extreme (Used for Seriousness only)
<b>M</b>	Rated as Medium	<b>NA</b>	Not Assessed
<b>H</b>	Rated as High		

*Table 8: Project Risk.*

Risk	Definition	Level	Likelihood	Mitigation Strategy
Estimates of project planning	The plan may be delayed for the initial estimate of the project.	L	L	Analysis and assessment of the scale. Reduce requirements.
Requirements	Internal contradictions that may exist in the request. Important requirements may be missing from the formal requirements specification.	H	H	Uniform requirements prior to analysis.
Estimated project schedule	Time sort of work.	E	E	Time project was created to be updated and evaluated regularly.
Programming experience	Programming Languages and technology	M	L	Experience sharing used to reduce the research time.
Technical processes	The standard procedure cannot meet the requirements of specific solutions.	L	M	Analysis of requirements and processes to ensure

	The new process may be required. The process can be improved and more efficient.			appropriate levels. If the new process is needed, we need to evaluate this response has improved over the old process.
Network	Block by Limited Bandwidth	H	H	Upgrade transmission line network
Time	Project implementation period is too short, so our team cannot complete this project on a short time. During project implementation, our team to learn and have more work to do, our team cannot focus all their time to carry out this project.	H	M	Reduce time and increase individual personal time working in their stay on the 7th day and Sunday.
Project Management	Project management system may not be sufficient to support the requirements of the project.	L	H	Discuss with the group to offer solutions and consistent accuracy.

## 6. Deliverables

*Table 9: Deliverables*

No.	Document	Deadline	File Name
1	Proposal Document.	16 –Mar – 2021	C2SE.12_Proposal_LET_ver1.2.docx
2	Project Plan Document	20 –Mar – 2021	C2SE.12_ProjectPlan_LET_ver1.1.docx