

**International School**

**Capstone Project 2**

**CMU-SE 451 – C2SE.12**

**Project Plan**

**Version 1.1**

**Date: March 20th, 2021**

**Learn English Together**

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Name Signature Date

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Name Signature Date

**PROJECT INFORMATION**

|  |  |  |  |
| --- | --- | --- | --- |
| **Project acronym** | LET | | |
| **Project Title** | Learn English Together | | |
| **Start Date** | 26 Feb 2021 | **End Date** | 08 Jun 2021 |
| **Lead Institution** | International School, Duy Tan University | | |
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| **Project Web URL** |  | | |
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**DOCUMENT APPROVALS**

The following signatures are required for approval of this document.

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**DOCUMENT NAME**

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| **Version** | **Person(s)** | **Date** | **Description** |
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Introduction:

* 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. Project Overview:
* Reference to C2SE.12\_Proposal\_LET\_ver1.2.docx
  1. Project Deliverable:

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

1. Team Organization:
   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 |

* 1. Role and Responsibility:

***Table 2: Role and Responsibilities.***

|  |  |  |
| --- | --- | --- |
| **Role** | **Responsibility** | **Name/Title** |
| **Product Owner** | * Understand the user and customers with their needs. * Collaborate with the development team. * Manage the stakeholders. * Describe the user experience and product features. * Provides detail user stories. | Duy Tan University |
| **Scrum Master** | * Communicate the value of Scrum * Teach the organization on Scrum to maximize business value * Attend all Scrum meetings * Preserve the integrity and spirit of the Scrum framework * Maintain the focus of the Team * Make the Team aware of impediments and facilitate efforts to resolve them * Serve as a coach and mentor to members of the Team * Respectfully hold the Team, Product Owner and Stakeholders accountable for their commitments * Continually work with the Team and business to find and implement improvements | Ha, Le Thanh |
| **Secretary** | * Record the content of group meetings and activities of the member | Hieu, Le Xuan |
| **Reviewer** | * Review documents | All Members |
| **Developer** | * Analysis of the functions and requirements of the product. * Code and test. * Fix error. | All Members |
| **Analyzer** | * Gather user stories. * Analysis user story to do specify Document. | All Members |
| **Tester** | * Do the Test plan * Creation of test designs, test processes, test cases and test data. * Carry out testing as per the defined procedures. * Graph the results and make sure people know when test results decline. * Prepare all reports related to software testing carried out. * Analysis and evaluate the Test result. * Ensure that all tested related work is carried out as per the defined standards and procedures. | All Members |
| **Mentor** | * Guide on the process. * Monitoring all activities of Team. * Help with anything. | MSc Huy, Truong Dinh |

* 1. Communication Methodology:

***Table 3: Communication Methodology.***

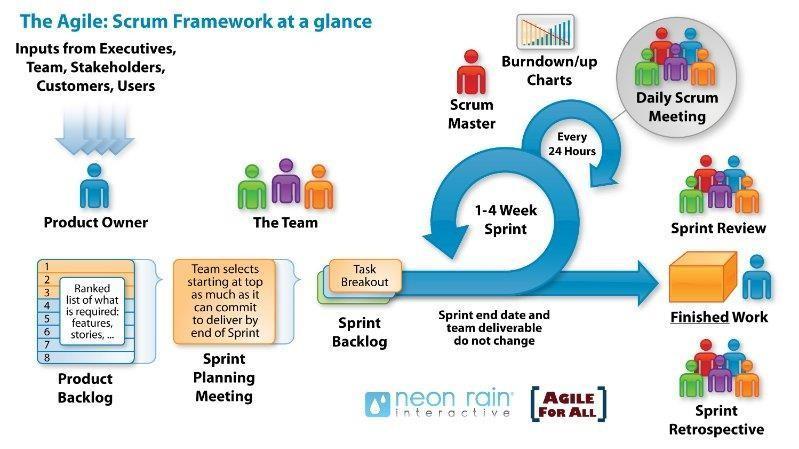
|  |  |  |  |
| --- | --- | --- | --- |
| **Audience/ Attendees** | **Topic/ Deliverable** | **Frequency** | **Method** |
| **Mentor and Team member** | Project Progress Review | Weekly | Meeting, Email,  Zalo |
| **Team Member** | Project Progress Review and Daily Meeting | Daily | Trello, GitHub, Zoom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

* 1. Communication and Report:

***Table 4: Communication and Report.***

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Type of communication** | **Methods, tools** | **Frequency** | **Information** | **People** |
| **Communication among in group** | | | | |
| **Scrum meeting** | 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 |
| **Sprint Planning Meeting** | 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 |
| **Retrospective meeting** | 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 |
| **Demo** | Meeting online | Every day | A web-based task tracking system. To manage or divide task, report bugs/issues. | Project team. |

1. 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.

1. Schedule and Cost:
   1. Detailed Schedule:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No. | Task Name | Start | Finish | Effort |
| **1** | **Initial** | **26/02** | **06/03** | **21 hrs** |
| **1.1** | **Gathering Requirement** | **26/02** | **28/03** | **8 hrs** |
| 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 |
| **1.2** | **Create Proposal Document** | **01/03** | **06/03** | **16 hrs** |
| 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 |
| 2 | **Start Up** | 07/03 | 14/03 | 44 hrs |
| 2.1 | Project kick-off | 07/03 | 08/03 | 2 hrs |
| **2.2** | **Create Document** | **08/03** | **14/03** | **42 hrs** |
| 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 |
| **3** | **Development** |  |  |  |
| **3.1** | **Sprint 1** | 15/03 | 12/04 | **103 hrs** |
| 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 |
| **3.1.5** | **Design** | 17/03 | 25/03 | **21 hrs** |
| 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 |
| **3.1.6** | **Coding** | **26/03** | **09/04** | **58 hrs** |
| 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 |
| **3.1.7** | **Testing & Fix Bug** | 09/04 | 11/04 | **10 hrs** |
| 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 |
| **3.1.8** | **Release Sprint 1** | **11/04** | **12/04** | **4 hrs** |
| 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 |
| **3.2** | **Sprint 2** | **13/04** | **10/05** | **185 hrs** |
| 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 |
| **3.2.5** | **Design** | 15/04 | 20/04 | **40 hrs** |
| 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 |
| **3.2.6** | **Coding** | 20/04 | 06/05 | **99 hrs** |
| 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 |
| **3.2.7** | **Testing & Fix Bug** | 07/05 | 08/05 | **32 hrs** |
| 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 |
| **3.2.8** | **Release Sprint 2** | 09/05 | 10/05 | **4 hrs** |
| 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 |
| **3.3** | **Sprint 3** | **11/05** | **01/06** | **119 hrs** |
| 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 |
| **3.3.5** | **Design** | **13/05** | **17/05** | **30 hrs** |
| 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 |
| **3.3.6** | **Coding** | **18/05** | **28/05** | **59 hrs** |
| 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 |
| **3.3.5** | **Testing & fix Bug** | **29/05** | **30/05** | **16 hrs** |
| 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 |
| **3.3.6** | **Release Sprint 3** | **31/05** | **01/06** | **4 hrs** |
| 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.***

* 1. Cost
     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***

* + 1. **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

1. Project Risk:

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

|  |  |  |  |
| --- | --- | --- | --- |
| **RATING FOR LIKELIHOOD AND SERIOUSNESS FOR EACH RISK** | | | |
| **L** | Rated as Low | **E** | Rated as Extreme (Used for Seriousness only) |
| **M** | Rated as Medium | **NA** | Not Assessed |
| **H** | 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.  The new process may be required.  The process can be improved and more efficient. | L | M | Analysis of requirements and processes to ensure 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. |

1. 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 |