#### DESCRIPTION OF PRODUCT REQUIREMENTS

Group: C2SE.07

Project: ViVu

Date: 15/03/2021

**I. Short description of product ideas (less than 7 statements)**

|  |
| --- |
| With the aim of building an application ecosystem related to the tourism sector including tour trade, social networking and management to form and develop a business in the future. The travel system is a place to promote local tourist attractions, support searching and quick payment for a tour. With the help of a smart chatbot, travelers can easily search for an ideal travel destination, book and pay for their favorite tour, and build a smart travel itinerary. Build a short video social network so that visitors can share their travel footprints with everyone. Through the accumulation of interaction points, users can get attractive gifts. Tour transaction system to commercialize tourism and integrate advertising for revenue and business development. The management system is built with management, evaluation and reporting functions to complete the business profession. The management system is built with management, evaluation and reporting functions to complete the business profession. All of these create a closed business model and are likely to expand and grow more in the future. |

**II. Requirements**

|  |  |
| --- | --- |
| High-level Functional Requirements | 1. Short video social network with checking harmful content(AI detection) |
| 2. Earn points for redeeming rewards from user interaction with videos |
| 3. Display advertisements in the app |
| 4. Support map checking places |
| 5. Update tour screen UI, home screen UI, chatbot support creating tour schedule in old out application. |
| 6 Create and upload video on out social network |
| 7 Track tour ticket for checking in. |
| 8 Manage advertisements, posts and earing points of the system. |
|  |

|  |  |
| --- | --- |
| Quality Attributes Requirements  (example related to issues: Ease  Use, Easy to Like, Easy to Learn, Easy to Understand, Easy to Buy / Yes, ...) | 1. Tasks handle no more than 5 seconds, can handle multiple hits at the same time. |
| 2. Account can be protected with authentication and encryption with high security |
| 3. User can use easily app without taking much time |
| 4. The processing features are logical and easy to understand |
| 5. Extending a new feature is easy and doesn't redesign the architecture |

|  |  |
| --- | --- |
| Operation Requirements  (related to issues: Speed, Accuracy, Performance, Stability, Load Resistance, Scalability, Safety, ...) | 1. Process quick tasks for no more than 5 seconds per task |
| 2. Handling traffic to applications that are more than 500 concurrently accessed. |
| 3. Ensure the number of transactions is processed correctly at the rate of 99.9% |
| 4. Completely load the application in no more than 10 seconds |
|  |

|  |  |
| --- | --- |
| Environment & Operation Requirements  (related to issues: physical impacts on the environment, interact with relevant or existing systems, conditions for product commercialization, ...) | 1. Web browsers: Google Chrome lastest version. |
| 2. Mobile: Android 10 and more, IOS 13 and more |
| 3. Operating systems: Microsoft Windows 10, Ubuntu 18.04 with SSD 120GB, RAM 2G, minimum 50Mbps |
| 4. External Services: Google Cloud, Map API, Music source, Stripe API |
|  |

|  |  |
| --- | --- |
| Requirements for Maintenance & Support | 1. Direct customer support consulting via email or phone number of out organization. |
| 2. Consulting tours and locations automatically through the chatbot system on the application |
| 3. Collect user feedback and monthly system maintenance |
| 4. |
| 5. |

|  |  |
| --- | --- |
| Security/ Safety Requirements  (related to issues: conditions of use / access to products, personal freedom, inspection, ...) | 1. Support login with SSO |
| 2. Must login to use social network, booking and paying tours. |
| 3. 3-layer password encryption |
| 4. Clear authorization for each type of user and restrict access. |
| 5. |

|  |  |
| --- | --- |
| Culture Requirements | 1. Vietnamese and English language support |
| 2. Culture according to international standards |
| 3. Does not contain harmful content, content level, toxic cultural content is specified in the law of Vietnam and international. |
| 4. |
| 5. |

|  |  |  |
| --- | --- | --- |
| Evaluate the complexity of engineering problems |  | 1. Involving wide-ranging or conflicting technical issues |
|  | 2. Having no obvious solution |
|  | 3. Addressing problems not encompassed by current standards and codes |
|  | 4. Involving diverse groups of stakeholders |
|  | 5. Including many component parts or sub-problems |
|  | 6. Involving multiple disciplines |
|  | 7. Having significant consequences in a range of contexts |

|  |  |  |
| --- | --- | --- |
| Standard requirements |  | 1. Code standard. (GNU, Oracle standard for Java, ..,) |
|  | 2. Design standard. (design patterns, object-oriented analysis and design,…). |
|  | 3. IEEE (1058, 1540, 830, 1016, 829, 1012, 1008) |
|  | 4. ISO/IEC/IEEE 12207:2017 (TCVN 10539:2014); ISO/IEC 25051:2006(TCVN 10540:2014); |
|  | 5. Other standards. (related to specific topics) |