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|  | **HASAN KALYONCU UNIVERSITY**  **Computer Engineering Department** **COME 499 Project Proposal Form** |

**Part I. Project Proposer**

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**Part II. Project Information**

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| **Starting Term** | |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | | 2 | 0 | 1 | 9 | / | 2 | 0 | 2 | 0 | |
| **Title of the Project** | **Mobile Document Translator using AR** |
| **Project Description** | |
| Nowadays, there are several different translation applications to help individuals to translate the text from one language to the another one. Although these applications are very beneficial for individuals who do not know any foreign language, they have to spent much time spent for translation since these applications are efficient to translate minimum amount of characters such as one sentence. This study proposes a mobile application developed by using AR technology to decrease the amount of total time spent for translating the long documents. The designed application will perform a page-by-page translation of a document. In addition, it automatically detect the language of the text written in the document. Therefore, the translation time will also decrease. The translated text will be located on the original document. As a result, the individuals can easily translate the documents by scanning the each page of the document. | |
| **Project Justification** | |
| **Novelty** | |
| **New aspects** | Automatic language detection using AR technology |
| **Complexity** | |
| **Challenging problem and issues** | Automatic language detection using AR technology is a challenging task for the developers. In addition, the success of the translation with multiple words is also a critical issue for the project. |
| **Related computer science fields and subfields** | AUGMENTED REALITY, COMPUTER GRAPHICS |
| **Tools** | UNITY, VUFORIA |
| **Risk involved** | |
| **Potential problems and alternative solutions** | Automatic language detection may be a potential problem since it is a challenging task to detect the language of the text. As an alternative solution, drop-down lists will be added into the system in order to enable user to select the languages that the text will be converted. |
| **Minimum work required** | 3 MONTHS WITH 3 DEVELOPERS or 3 MONTHS WITH 4 DEVELOPERS |