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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** | **Virtual Academic Advisor** |
| **Project Description** | |
| Academic advisors play a critical role on the personal development of the students during their university lives since they directly affect the success of the students. While the students who receive the right orientation from their academic advisors are successful in their university life, some students can not reach the desired levels with the wrong orientation. One of the most important reason which causes this problem is that some of the advisors can not find enough time to analyze both personality of the student and what grades the student took from the past courses in his/her curriculum in detail. As a result of this situation, the advisors can not predict whether the student will pass the future courses and cannot provide a solution to prevent this outcome in advance. In order to solve this problem, this study proposes an online system that predicts what grades the students will get from the courses by analyzing the past of their academic careers. An AI algorithm, which predicts the grades of the students for the future courses, will be developed and be integrated into an online system, which will be reachable by both the students and the advisors. Therefore, it is aimed to increase the success of the students in their university live by being provided more accurate academic counseling to students. | |
| **Project Justification** | |
| **Novelty** | |
| **New aspects** | Development of AI algorithm, which predicts the students’ grades for the future courses. |
| **Complexity** | |
| **Challenging problem and issues** | Development of AI algorithm and its integration will be a challenging problem for the developers of the system. In addition, using ASP.NET MVC, which is one of the new technology in web development, can be also considered an issue that the developers should deal with. |
| **Related computer science fields and subfields** | WEB TECHNOLOGIES, ARTIFICIAL INTELLIGENCE |
| **Tools** | ASP.NET MVC, MSSQL, PYTHON, BOOTSTRAP, JAVASCRIPT, CSS, ENTITY FRAMEWORK |
| **Risk involved** | |
| **Potential problems and alternative solutions** | Integration of AI algorithm, which will be developed by using Python, to the developed web platform by using ASP.NET MVC can be considered as a potential problem. The alternative solution is that the AI algorithm can be developed by using C#, which is suitable for ASP.NET MVC. |
| **Minimum work required** | 3 MONTHS WITH 3 DEVELOPERS |