

**College of Engineering**

**COMP 491 – Computer Engineering Design**

**Requirements Document**

**KUPEP (Protecting Exam Platform)**

**Spring 2021**

**Participant Information:**

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| --- | --- | --- | --- |
| **Name** | **ID** | **Email** | **Phone** |
| Umut Günçer | 60598 | uguncer16@ku.edu.tr | +90 530 944 84 94 |
| Yiğit Çırak | 49730 | ycirak14@ku.edu.tr | +90 543 879 99 93 |
| Batuhan Acar | 60186 | Bacar16@ku.edu.tr | +90 532 301 48 62 |
| Taluhan Öneş | 60035 | Tones16@ku.edu.tr | +90 537 717 74 12 |

**Project Advisor:**

Serkan Çil

**Table of contents**

[Introduction 3](#_Toc66307877)

[1. Current System Disadvantages 3](#_Toc66307878)

[2. New System – Examiner 4](#_Toc66307879)

[3. New System – Exam Taker 5](#_Toc66307880)

[4. New System – Admin 6](#_Toc66307881)

[References 7](#_Toc66307882)

# Introduction

Basic Assumptions:

• All test takers take the exam at the same time in a physical computer lab room.

• Any desktop software can be used for assessments (e.g. Matlab, MS Excel etc).

• Internet access and communication between test-taker devices should disabled when the exam starts.

• Test taker should be able to save and upload the test results to a designated protected location during the exam only.

• Internet access and communication between test-taker devices should enabled when the exam ends.

# Current System Disadvantages

We have analysed both from examiners’ perspective and the exam takers’ perspective and defined the current system disadvantages as follows:

* Examiners announce any updates, time or mistakes by communicating in the exam which is bothering.
* Students want help by raising hand or shouting to examiner which is distracting.
* Disconnecting the internet is done manually this process is confusing to some examiners who are not familiar with the operation.
* Internal network can not be disconnected, which results in security flaws such as; examiners can reach course content from the KUBlackBoard and may download some material from their university mail account.
* It is not possible to conduct an internet enabled exam while banning some sites that the exam takers may reach the solutions of the exam.
* Students are making a line in front of examiner’s computer and checking whether their projects are submitted or not.
* Exam-takers are uploading whole project and thinks that examiners or assistants will extract the necessary parts and they will only be graded from that part. However, by sending the whole work, exam-takers get less grades.
* Exam takers may make a usb delivery between their friends.
* Examiner warns an exam taker in front of whole department which is humiliating.
* During the exam teachers are showing how much time left on the school board by manually writing on the class board and only changing it when limited time has left like 5min, 15min, 30 min and they are announcing to whole class by shouting which is so distracting.
* Because of the exam time stress, exam-takers are uploading whole project and thinks that examiners or assistants will extract the necessary parts and they will only be graded from that part. However, by sending the whole work, exam-takers get less grades.
* If an exam takers PC shutdowns unexpectedly, the exam taker has to communicate with the examiner, but sometimes the examiner would not recognize the exam taker. This will result as a time loss for the exam taker.
* Examiner is uploading the exam to the class folder which is hard to find between all the other class folders. The class folder list is very crowded, so it is hard to find the exams class folder. This situation may cause the exam taker to upload the exam to a wrong folder.

# New System – Examiner

* Exam content should be uploaded by the examiner into the program easily.
* The examiner should be able to send the exam content to the exam takers when the content is ready.
* The examiner should be able to see each computers IP address and the name of the exam takers who are in logged in the computer.
* The examiner should be able to choose type of files an exam taker can submit. Examiner will control the submission directory.
* Examiners should monitor whether exam-takers are connected to main computer or not.
* Examiner should be able to cancel usb usage.
* Examiners should be able to restrict the use of internal and external sites. By entering a list of inaccessible sites.
* The examiners should be able to communicate with exam-takers from public and private message box.
* The examiners should be able to see who has submitted their work.
* The examiner should decide whether they will make an online or offline exam by pressing the internet button in the exam settings
* If an examiner wants to let USB or cancel help feature during the exam, the changes, examiner will make in the exam settings, will be seen in the public message and every test taker will see it.
* Examiner should decide the exam takers would want help during the exam by pressing the help button.
* Examiner should be able to extend the exam time during the exam.

# New System – Exam Taker

* Exam-takers should be able to submit their work by browsing their folders and pressing the send button.
* If an exam taker changes the time on the PC this should not affect the reaming exam time. Time controls should be done through the examiners program.
* Exam taker should see the remaining time for the exam.
* Exam takers should see the exam content in the program, not by browsing to a directory.
* There should be a help button and by this way they can call assistants or examiners to their side.
* If the examiner lets student use private message, the exam takers should be able to communicate from that platform.

# New System – Admin

Admin will block the usage of task manager, before the exam.

Admins should be able to see all the logs.

Logs include:

* Private messages
* Public messages
* Exam settings
* Exam content
* Exam takers submission work
* Exam takers Submission time
* Exam start time
* Exam send to client time
* Exam uploaded to the program time
* Exam takers’ connection, disconnection time
* Exam takers’ help requests
* Examiners’ settings update
* Exam time extension actions.

References

Give the list of references. All the references should be cited within the text of the proposal report.