

# Initial document for the user requirements derived from the brainstorming session

## 1. Introduction

We live in a modern world in which we have a very powerful tool that enables us to have an upgrade in every level and sector of society: technology. Amongst all the other things, the educational process is more optimized, more effective, and most importantly, more powerful. Creating a "Video-conference system" is essential for all the educational institutions, creating better stability and continuity in every possible challenge that the world and society will have, allowing unlimited access of the necessary material to the students, but in the same time, creating new opportunities and freedom to the teaching staff for better management of the lecture, having more ways of display, explanation and clarification.

The goal of this document is to define the detailed explanation of all the required functionalities, characteristics, needs and goals of the project. The Video-conference system will be a web-based online platform for making the process of the educational institutions better and more efficient.

## 2. Initial user requirements

Requirement ID	Requirement Statement	Level of Priority
RID001	The system shall be implemented on a server in the Central Macedonia region in order to reduce latency.	Priority 1
RID002	The system shall provide three types of user accounts: RID002.1 - Students RID002.2 - Administrators (Professors, Staff) RID002.3 - Guest users	Priority 1
RID003	The system shall provide a privacy policy for each user account	Priority 1
RID004	The system shall provide three different user interfaces: RID004.1 - Students RID004.2 - Administrators RID004.3 - Guest users	Priority 1

RID005	The system shall provide three conference types : RID005.1 - Lectures RID005.2 - Office hours RID005.3 - Meetings	Priority 1
RID006	The system shall allow every user the option to turn on/off their camera and microphone during the conference session	Priority 1
RID007	The system shall allow the administrator the option to share their screen during the conference session	Priority 1
RID008	The system shall allow the Administrator user the option to record the conference session	Priority 1
RID009	The system shall allow the Administrator user the option to kick users during the conference session	Priority 1
RID010	The system shall allow the students the option to ask a question during the conference session	Priority 1
RID011	The system shall allow the students to create private conference sessions	Priority 1
RID012	The system shall prevent exploitation of the online examination service by : RID012.1 - Observation of the examinee's environment before the exam RID012.2 - Identification of the examinee through a camera and microphone RID012.3 - Observation of the examinee's body and eye movement through camera	Priority 1

### 3. Discussion

After the great brainstorming session we had, we gathered a lot of interesting ideas that are the cause of 90% of the requirements in this document. We captured all of the ideas, started analyzing and filtering them down to the ones that really were a must for the system. The way we filtered the ideas down was the following: we were led by the original document which had explained the original idea, the stakeholders and the needs of this kind of system. Firstly, we read all of the ideas, then we discarded the ideas that were not actually necessary for the system and the ones that did not lead to the main goal of the system. We followed the intended goal of the system and we ended up with the requirements that are written in this document.

Not all of the ideas from the brainstorming session had the same level of priority. When I say level of priority I mean that the requirements have different degree of necessity for the upcoming system. As a result from that, we had to prioritize all the different kinds of requirements. The way we achieved this goal was by selecting the ideas that were fundamental for the system that we are building. That is why we have two levels of prioritizing. The first level is composed from the requirements that are essential and mandatory for the system that we are developing. These requirements derive from the intended goal for the system and are the key building blocks for achieving it. The second level of priority belongs to the requirements that are beneficial functionalities. The ones that lead the user for a better user experience.

### 4. References

- [1] Ian F. Alexander, Richard Stevens, Writing better requirements, Addison-Wesley, 2002
- [2] Karl E. Wieggers, Joy Beatty, Software Requirements, 3rd edition, Microsoft Press, 2013