Software Project Management Plan (SPMP) Outline for collaboration peer teaching system.

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I. Introduction:

A collaboration peer teaching system, where students registered in a course can join the group of the course and use the system to collaborate on the subject, exchanging ideas and help each other with the course contents. The system has 3 channels of user interfaces, a web site and 2 mobile apps, one that works for Android® and the second app for Apple IOS®.
The project has some deliverables like:

1. 3 channels of user interface (website, android app, and apple IOS app) includes all the stated features.
2. Design documents.
3. Prototype.
4. Testing documents includes test suits.
5. Research reports and software tamplates.

In the system the students registered in a course can join the group of the course and use the system to collaborate on the subject, exchanging ideas and help each other with the course contents.
The system will also offer a marketplace where paid services are also being available,
such as a student can sell a problem solution to his peers for 5 L.E. per solution per buyer.
Each course group must have a coordinator, usually the course teacher or one of the assistants, to make sure that no cheating, nor solving homework's or implementing projects for others is happening.
The system must have all the features of google classroom and the users are registered on the system the same way as google classroom system.
The system revenues will be based on a revenue share model where 10% of each sale will be deduced to the system owner.
Also, a flat subscription fee will be charged for students. The course coordinator will also be rewarded 25% of all the system income of his/her course.
The system must have also the ability to create and manage online chat rooms where text, voice and video can be streamed.
The project will be piloted with the CESS program in Ain Shams university, where you can consider Prof. Ayman Baha as the project sponsor for the pilot implementation.

II. Project Organization:

As the requirements of the project are clear from the beginning, the system would be developed in waterfall process model.
The organizational structure would be project based organizational structure for many advantages. The advantages of this structure: First, focus on this project team, project manager is solely responsible for the project, the only task for project members are to complete the project, and they only report to the project manager, avoiding the multiple leadership; Second, the project team's decision is developed within the project, the reaction time is short; Third, in this project, members work with strong power, high cohesion, participants shared the common goal of the project, and individual has clear responsibilities.
The organization interfaces would be from CESS ASU unit head and the project sponsor Dr. Ayman Baha.

Task/process.	***Responsible person/team.***
Initiating	Project manager.
Planning	Design team.
Executing	Technical development team.
Deployment	IT team.
Controlling	Project manager.
Closing	Project manager.

III. Managerial Process

The management objectives are to manage all the processes of the project to drive It in the shortest time with the lowest cost with highest quality. The highest priority in managing this project is driving the highest quality then the shortest time and then with the lowest cost.
The main critical assumptions and constrains in the project are that
The proposed system must be a valuable asset to Ain shams University. It must be supported by current staff members, Dr . Ayman Baha, and TIEC office. It must be assumed that the project manager will lead the project effort and the project team must be actively involved. The purpose of our financial analysis we will assume appropriate costs for labour ,software and hardware. It is assumed that the new system will be able to run on the hardware of the Ain Shams university. The system must contain all information and data in a safe, secure setting and able to be supported by existing staff. The system revenues will be based on a revenue share model where 10% of each sale will be deduced.

Probability and impact scores for each risk:

Risk	Probability Score	Impact Score
R1	0.4 = 40%	10
R2	0.8 = 80%	9

Rationale for negative risk: For risk R1, we determined that the risk of hardware has a medium probability of occurrence and a high impact on meeting the project objectives. We allocated a 40% probability for this risk because it is a middle range percentage. It is difficult to judge so this probability could interchange with 50%. We did not see this risk as a high probability of occurrence because it was relayed to our team that ASU is the supplier for all of Common Cause. For the impact on the project, we determined that an impact score of 10 out of a scale from 1-10 is necessary. We claimed this to be the highest impact score because without hardware, the project is not feasible. There is not a great probability of this risk occurring however if it does, it dramatically impacts the outcome of the project.

Rationale for positive risk: For risk R2, we determined the risk of improved efficiency has a high probability of occurrence and a low impact on meeting the project objectives. We allocated 80% probability for this risk because it is a high range percentage. We saw this as a high probability because we the success of the project, improved efficiency will be a very likely result. For the impact on the project, we determined that an impact score of 3 out of a scale from 1-10 is necessary. We deemed this impact a three because this risk does not effect meeting the project objectives.

Risk Register

No.	Rank	Risk	Description	Category	Root Cause	Triggers	Probability
R1	1	Hardware risk.	A major portion of this project involves the right hardware to hold the organizations website. A national level sponsor, Kintera, is supposedly the provider for all hardware needs. There will be a major roadblock in the project if they do not sign off on the proper hardware.	Technology Risk	We did not get confirmation from the project sponsor to see if the hardware was approved.	Communication relationship is unknown between sponsor and funder.	0.4 = 40%
R2	2	Improved Efficiency	Implementing a new system has the opportunity to efficiently implement the requirements. to a customized system for the purpose solely for TIEC Office.	Structure / Process Risk	limited team experience.	TIEC wants to have its own identity and this can happen through their customized system.	0.8=80%

The monitoring and controlling would be the responsibility of the project manager, so he will join the teams in making the decisions and there meetings and he has the right to change or disagree an any decision takin.

IV. Technical Process

While developing the system many methods and tools and techniques would be used for example the software would be developed on the MVC model and on waterfall model, and using frameworks and tools for constructing the system, for example the front-end design and the networking in the project even in deployment the system on the hardware and on the internet we would follow certain methods and techniques. The software documentation shall be developed carefully to document all the requirements and the working phases and processes and the test strategies and the test suits and every thing related to the software. The system would be maintained frequently and evaluated, as if any bug is found in the system or any missing function is found the system would be updated to insure that the system drive all the needed requirements.

V. Work Packages, Schedule, and Budget

The sponsor would like to see the project completed within six months, but there is some flexibility in the schedule. We also assume that the new system will have a useful life of at least three years.
Work packages are defined in the work breakdown structure (WBS) they are the lowest level in the WBS. Each task is depending on the previous task in the WBS in the top level for example 2.0(planning) depends on 1.0 (project initiation) depends and so on.
The budget allocation would be as following:

Process	Budget (%)
Initiation	10%
Planning	20%
Executing	40%
Deployment	15%
Controlling	10%
Closing	5%