FINAL YEAR PROJECT
Software Requirement Specification

Virtual Webinars

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Submitted By

FYP17CS-006

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Revision History

Name	Date	Reason For Changes	Version

1. Introduction

Virtual System become the need of hour, especially in epidemic the people are in trouble, facing blackout in business can drops the economy of any country. But every problem comes with its solution it is just need an eye to look out of the box. First we have to look on the major problem. How to manage a gathered event in pandemic? Is there any alternative or managed way to held events? The answer is YES. We have heard of word "Virtual System". So why are not converting those events to Virtual Webinars? So webinars can be of any kind of event categorized by its nature. This Web Application is called ***"Virtual Webinars"***. This application will help user to explore webinars, and organizer can earn from this platform through their bank account. The most important bridge is the video live stream between the organizer and audience to interact themselves. Webinars are more beneficial as compared to physical events because physical events contact to specified number of seats but through internet user can join the webinar to learn, serve, earn and entertain.
Technology tends to ease human work load, intelligent systems makes it easier. Looking around the current situation, Webinars are beneficial in order to do work from home easier at more arranged platform. There are many other platform that hold live streaming but there's not a single platform who serve in well managed way. We will implement different features to make more reliable and efficient for end users.

1.1 Purpose

Inflation on technology in new era has made the primitive living outdated. It has stepped in to every field to make it more convenient for end users by connecting purposely with online systems. ***Virtual Webinar*** is a web based Application, to engage the audience to join and organize the events virtually. Event will be of any kind but categorized by its nature for example Educational, Religious, Exhibition, Launch, Workshops, Seminars and Entertainment.
Application will help users to explore the events. Organizer will be the event holder and will earn from it. It will contain an interactive bridge between the audience and organizer to join the live stream. Webinars will be more beneficial as compare to manual events because it has viscosity to engage, learn, earn and serve. The main purpose is to merge all the co-related features at a single platform because it is much easier for end user to handle all the event related feature in one platform rather to jump on several platform.

1.2 Document Conventions

Document is written in Time New Roman Font, Main heading is bold to make it focused and easy to read. Highlighted words will be italic and bold. For diagrams, we used ***lucidchard*** online tool.

1.3 Intended Audience and Reading Suggestions

The SRS document is used to apprise the reader for approaching web application (Webinar) and how he can use it productively, the reader will get a general insight on a particular subject of the product include its functional and non-functional requirements as well as it features. This project is useful for the webinar development team and the target audience.

The different types of audience are:

Developers: Those who use the web application as well as the edit app.
Admin: Who only use the app and manage the organizers in an app.
Organizer: Those who only use the app and will organize the webinars for the audience.
Audience: Those who only use app and watch their booked webinars.
Visitors: Those who only use the app.

1.4 Product Scope

The motive of this virtual webinar is to soothe humans to work from home. This webinar will cover at city level. As we perceive in the current era of COVID-19 physical communication and interaction is unattainable so we will prepare a platform through which user will explore webinars and organizer may earn through it. This Web Application will be able to achieve the following goals.

- Video chat interaction between audience and organizers.
- Detail Insights of all the webinars.
- Physical events to have a virtual way to interact the audience.
- Use for earning purpose for organizers.

1.5 References

http://Platinumlist.com

2. Overall Description

In virtual webinar audience will registered for joining the webinar of their interest which will be conducted by different organizers with the approval of admin. Without Registration user will only grasp an overview of this Web App. After the registration, the registered user will get remainders from the application of his booked and interest related events. .

The audience will book themselves using their account numbers and will get a ticket code and graphical image. After joining webinar audience will get video call from the organizers and they will also putt on live chat during live streaming.

2.1 Product Perspective

Virtual Webinars will be the follow-on member family of a web application ***platinumlist*** that holds advertisement records and booking of upcoming featured events but we will implement it thoroughly with new perspective to hold a virtual live stream between audience and organizer.

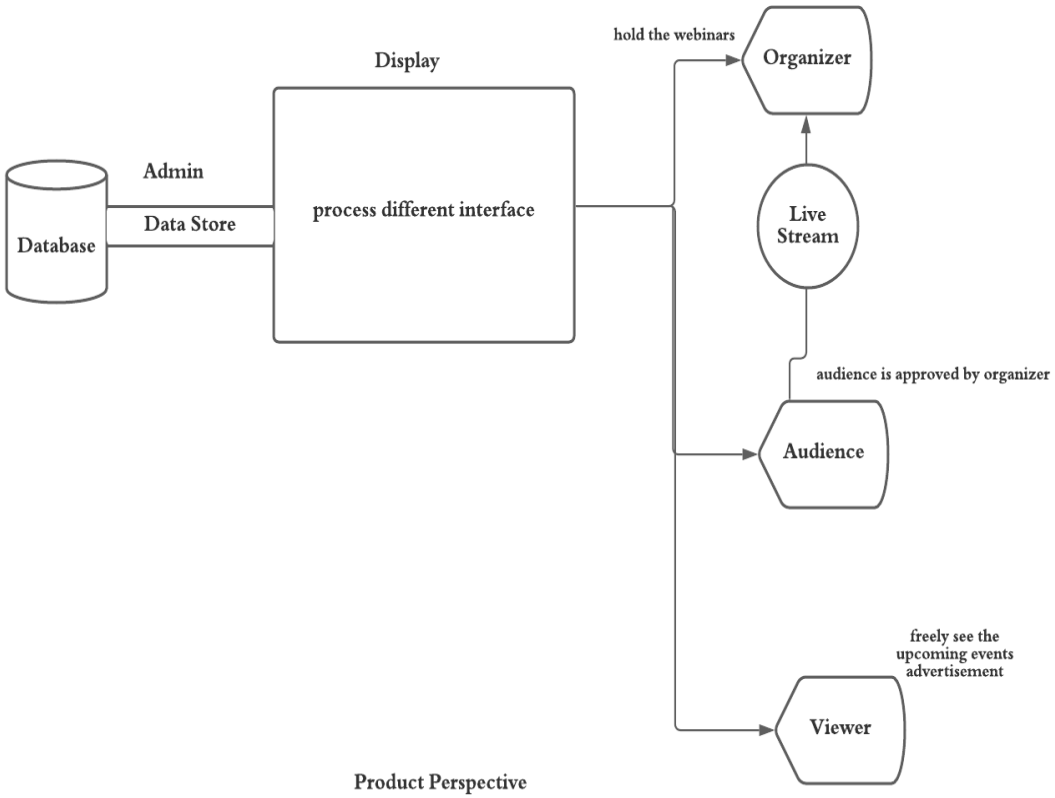
Following are the main components of Virtual Webinars Interface.

- There will be four main external components ***Admin, Organizer, Audience, Viewers***.

- Interlinked Components will be Organizer and Audience while all the component will be linked with Admin.

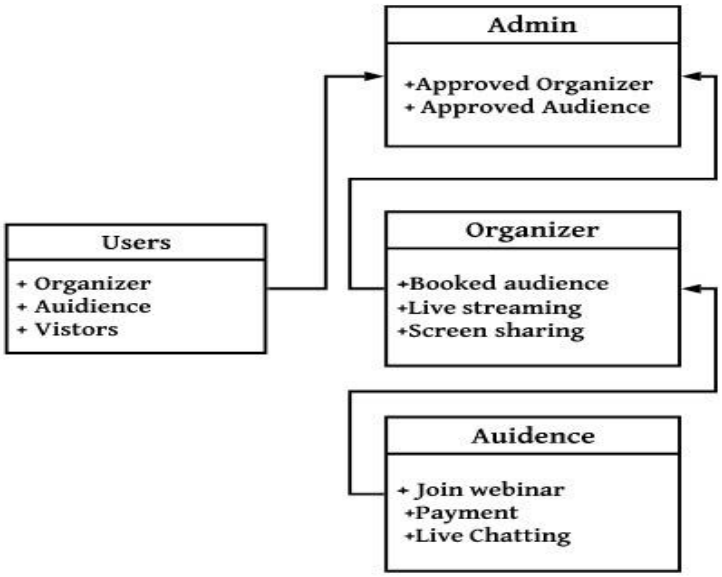
- Inter Connection of Organizers and audience will be done through registration and approval.
- Registered Users will be audience for Organizers.
- Database is for-most component to store all the data of main external components.

Figure is shown to describe the major components.



Product Perspective

2.2 Product Functions



2.3 User Classes and Characteristics

The major functions of the Virtual Webinars (Web Application).

Admin

- Admin will add the organizer and audience according to their nature.
- Admin will delete the organizer.
- Admin will update the details of the organizer.
- Admin will approved the organizer.

Organizer

- Organizer will provide the registration form of his virtual webinar to the audience.
- Organizer will provide the ticket of his virtual webinar to the audience.
- Organizer will provide his account number to the audience for the purpose of payment.

- After payment organizer will provide the code to the audience for joining virtual webinar.
- Organizer will provide the advertisement and timing of his virtual webinar to the audience.
- Organizer can be modify the details of advertisement and timing of his virtual webinar.
- Organizer will communicate to the audience through Live Streaming.
- Organizer will be able to share his desktop window for the ease of audience.
- Organizer will be able to see insight of his virtual webinar.

Audience:

- Audience will fill the registration form given by organizer.

- Audience will be able to download the graphical image of ticket after filling the registration form.
- Audience will have to pay the cost of ticket via organizer given account number.
- After the payment admin will be able to join the booked virtual webinar via code given by the organizer.
- Web Application will be able to remind the audience about their booked events and his interested related events and upcoming events too.
- Audience will be able to communicate to the organizer via live chatting.

2.4 Operating Environment

Operating environment for the webinar listed below.

- Distributed database
- client/server system
- Operating system: 64Bit Windows 10 OS
- 4GB Installed Memory
- Intel Processor corei5
- IDE: Visual Studio Code
- Deployment: Docker Container
- Database: Mongodb Database
- Platform: Python (Django Framework) for Backend Development and React.js (JavaScript Library) for Frontend Development.

2.5 Design and Implementation Constraints

The key restriction here will be to verify the validity of audience and organizers.

- Built framework will run on window 10 OS that's include a web browser that supports Python, React.js (java script Library) and Mongo db.
- The audience will buy the E-ticket to join the paid webinar.
- Without E-CODE the audience will not get the joining video option.
- The information will be given by the user during registration will be maintained in the database and reviewed at login time and message will be shown for erroneous results.

2.6 User Documentation

Following manuals will be provided with the application for further details to help the user.

- Software Requirement Specification (**SRS**)
- Software Design Document (**SDD**)

2.7 Assumptions and Dependencies

- Since the webinars will only accessible through the Internet, it is assumed that the audiences (end user) will have a connection to the Internet.

- It is also assumed that the user will have a web browser that will be eligible for display the website. (I.E. Microsoft Internet Explorer or compatible browser)

Assumptions:

- There is no need for anyone who will order more than a single ticket in a single transaction.
- The organizer account's username and password will be hard coded

3. External Interface Requirements

3.1 User Interfaces

- Front-end software: VS Code
- Back-end software: Python (Django Framework)

3.2 Hardware Interfaces

Display monitor: It is recommended that a high resolution LCD or CRT monitor be used for the better results.

Input devices: All hardware interfaces will be provided by the operating system, the system will require a keyboard and a mouse. In addition a properly configured sound card and a voice input device which will be needed to utilize the conferencing feature.

Visual Input: The conferencing feature requires a high resolution video input device. The device needs to be configured in accordance to manufacturer recommended settings and should be in operation before enabling the conferencing feature.

3.3 Software Interfaces

The virtual webinar web application has a seamless integration with the local operating system/hardware system. Once the user logs on the virtual webinar system, the interface seamlessly manage the local input/output/operating system, device as needed.

Following are the software used for the virtual webinar online application

Software used	Description
Operating system	We have chosen Windows operating system for its best support and user-friendliness.
Database	To save the organizers records, audience records we have chosen Django database.
Languages	To implement the project we have chosen React.js library and python language for its more interactive support.

3.4 Communications Interfaces

This project supports all types of web browsers. We are using simple electronic forms for the reservation forms, ticket booking etc.

4. System Features

The high medium feature of this application that system will have the interactive communication between event holder and the audience at run time process. Communication will handle in runtime live stream and every event holder will be hold event according to the available functionalities of system. Application will be secure enough to catch the unfair audience [such as person is trying to enter in a webinar without the e ticket code]. Parallel webinar will make it more usable and organizer's insight will help them to see the reached audience.

4.1 User Management

4.1.1 Description and Priority

Interaction of user is the high medium of this application that will give user to get involved in the system. So user must have a registered account to get facilitate by the functionalities. Without this user will be the lay-person for just looking over the advertisements.

4.1.2 Stimulus/Response Sequences

4.1.3 Functional Requirements

Back-up Email: User must have an email address, it will help them for future changes in case they forget the old password.

Verification: It will allow system to check the existed credentials so that user can log in to get facilitate otherwise it will through pop up message of ***Invalid Entry.***

Update: If user want to edit and save their profile information it will immediately change on server in response of any changes.

Delete: If user wants to deactivate the account or delete any information from profile rather than necessary, it will also delete from the server immediately.

4.2 System Feature 2 (and so on)

5. Other Nonfunctional Requirements

5.1 Performance Requirements

The system will perform the best possible way. In every user's input action there will be immediate response by the system. In case of getting wrong inputs, system will response with pop out error messages, saving the setting or session will get <3 second(s) delay. So delays will be very less and system will work interactively. Although posting will be depend upon the user side network connectivity and speed.

5.2 Safety Requirements

User's data and information will be safely transmitted to server without any changes and data of profile will be shown by complete authentication by user's credentials.

5.3 Security Requirements

- Virtual webinar app will use secured database.
- System will have different type of users and every user access constraints.
- Normal Viewers will just take a review of website and cannot modify or edit anything.
- Organizer and audience will modify their personal and some other information according to their related category.
- Administrator will allow to change his/her system-generated password as he/she wishes.
- The main security concern is for users account hence proper login mechanism will be used to avoid hacking

5.4 Software Quality Attributes

5.4.1 Maintainability

Users will displayed acceptance message within 5 seconds, when he/she submits entered data to the system.
Warning messages about entrance data out of defined standards will remain on the screen for 3 seconds.

5.4.2 Portability

Webinar web-app will be manageable in web-browsers of Internet Explorer, Google Chrome, Opera and Safari.

5.4.3 Availability

If the internet service gets disrupted while sending information to the server, the information will send again for verification.

5.4.4 Usability

The webinar event will satisfy maximum number of audience needs.

5.5 Business Rules

<List any operating principles about the product, such as which individuals or roles can perform which functions under specific circumstances. These are not functional requirements in themselves, but they may imply certain functional requirements to enforce the rules.>

6. Other Requirements

<Define any other requirements not covered elsewhere in the SRS. This might include database requirements, internationalization requirements, legal requirements, reuse objectives for the project, and so on. Add any new sections that are pertinent to the project.>

Appendix A: Glossary

<Define all the terms necessary to properly interpret the SRS, including acronyms and abbreviations. You may wish to build a separate glossary that spans multiple projects or the entire organization, and just include terms specific to a single project in each SRS.>

Appendix B: Analysis Models

<Optionally, include any pertinent analysis models, such as data flow diagrams, class diagrams, state-transition diagrams, or entity-relationship diagrams.>