

# Project Synopsis

Development of cloud base application capable of providing a graphics interface to low configuration devices.



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## **INTRODUCTION**

- Graphics/Rendering capabilities of various devices depend majorly on the hardware configurations.
- Allowing the idea of cloud computing to be used so as take the Graphics processing away from the device an interface can be obtained.
- The idea of establishing an alternative to a high configuration led us to select this project.

## **REVIEW OF RELATED WORK**

- An idea of online gaming where inputs are ported from the client machine to the server so as to generate the same in another system achieves a multiplayer gaming experience.
- Applications and various plugins on web browsers can also be used generate a distributed gaming experience.
- Graphics need to be loaded onto the systems to obtain its capabilities and still depend on the device configurations.

## **DISADVANTAGES**

- Loading assets onto the running device is very time consuming thus causing an unpredictable delay in the client side during load time.
- Use of application loaded onto the device takes up the devices configuration and hence restricting the use of the application as it depends on the configuration of the device in use.
- The stability of the hardware may also cause a problem.

## **OBJECTIVE**

- Design and development of a graphics interface that allows graphics application to be run on the device independent of its configurations.

## **PROPOSED METHODOLOGY**

- Use of the Kivy framework to develop a client side application built on Python to handle events generated by the user and handling video being streamed into the client by the server.
- Use LAMP configured to run on Python so as to stream current interface as video to the client and to generated events generated by the user on the client side.

## **HARDWARE REQUIREMENTS**

- Low configuration device (laptop, phone etc.).
- High configuration server (laptop working on LAMP as server).

## **SOFTWARE REQUIREMENTS**

- Kivy framework.
- LAMP configured to run Python scripts.

## **MODULES**

- App selection module to define which application the clients wants to run.
- Video stream handler module on both client and server site.
- Event handler module at client site.
- Event generator module at server site.

## **CONCLUSION**

- Obtain a software capable of interfacing graphics application by running it on the server.