**Distributed Systems**

**Proposal**

**Name: Muhammad Abu Bakar Sani**

**Student No: x17112044**

**Course: BSHCSD4**

***Smart Buildings***

Smart buildings are very popular these days. Everyone wants to have smart features and facilities in their houses, offices, buildings etc. As all this is making a person life easy. The three services I will be implementing in my project are Heating, Light and Security. Java & Python are the programming languages which will help me to achieve my goals. But Java will be the main one. There will be a Client GUI which will help me to control all 3 services and will show an appropriate response after contacting to a Server.

The 3 services will provide the following functionalities:

**Light**: User can turn ON and OFF the lights, set the timer, when some enters the light gets ON automatically.

**Heating**: User can set the intensity of heat, can set a timer, can turn it ON and OFF

**Security**: can validate passwords, open & close doors, can send alerts for unauthorised accesses, once access is granted the lights get on.

As you can see from the above, all these are the necessary and basic needs of a person’s life, and smart technology is helping a person to control them. The main reasons of implementing these services are to save person’s time, can access it whenever and wherever they like. They do not actually need to go to switches or buttons to control them but can just do it from a single touch of their smart device.