SOFTWARE ENGINEERING PRINCIPLES
PROJECT PROPOSAL

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1. Music Composer:

In this project, I am going to develop a computer software which is used to compose a song or music with some available virtual instruments. To make a virtual instrument I will be using python to create some images and will be storing the tone of each and every single virtual instrument along with the software's storage. When the user uses this software, it will be a good experience for the users to use because it will be user friendly. And can export the files in different format. This project is totally based on computer software.

2. Smart Valve Positioner:

Smart valve positioner is nothing but a valve attached with a positioner which will be used in the fuel stations to fill the fuel for the vehicle. The idea is to change the manual valves which is been used currently with the smart valve which consists of a valve with a valve positioner along with a controller to control the flow, pump speed etc. so that the efficiency will be increased. By this way, the fuel filling will be more precise and accurate. The users will be profited. This project involves hardware and software to make it work.

3. Personal Assistant Robot:

As the name itself explains, this is going to be a robot which will be a personal assistant to its boss. It will assist its boss with all sort of physical activities. It can move, hear, see, speak back and perform some actions using a robotic arm attached to it. This contains image processing where it can point a particular object. So, when the boss gives some voice command, the robot will receive the command through the microphone (voice recognition), and tells the boss back with a pre programmed voice message (speaker) as command received and performs the command physically. The general idea of the project is to imitate the real human being's actions with an embedded system. This project involves hardware and software part.