CEN 5035 Software Engineering
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Smart Home Project Description and Raspberry Pi Kit Guideline

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The concept of the final project would be related to a smart home using IoT devices. We will be using a Raspberry Pi as the brains to communicate to the Internet of Things (IoT) devices that could communicate with external input and send information back to users. Some ideas of smart home are babysitter, elderly caring bot, intruder detections, light switches, conversation bots, language translators, etc. You could also design your device to be a Morse code translator for encrypted communication. Sky is the limit on the scope of your work.

The course project will be implemented in phases with different functions delivered over time.

Please work with your groups to discuss what you would like to do before purchasing any of the kits. Some of the sensor kits might have different things. It is only required to have 1 complete kit (raspberry pi kit + sensor kit) per group. There are also many other kinds of sensor kits out there that might work for your group's purposes, these are just suggestions. If you have any questions related to Raspberry Pi's or the sensor kits please contact Adam Corbin acorbin3@fau.edu.

Hardware
Here is the following that I am suggesting for the final project
Required:
($90)CanaKit Raspberry Pi 3 B+ (B Plus) Ultimate Starter Kit (32 GB Edition, Clear...https://www.amazon.com/dp/B07BC567TW/ref=cm_sw_r_tw_dp_U_x_fDJADbEKMN3AP

Pick 1 from the following:
($30)ELEGOO Upgraded 37 in 1 Sensor Modules Kit with Tutorial Compatible with Ardu...https://www.amazon.com/dp/B01MG49ZQ5/ref=cm_sw_r_tw_dp_U_x_a8IADb8VKKE7

($25)kuman K5-USFor Arduino Raspberry pi Sensor kit, 37 in 1 Robot Projects Starte...https://www.amazon.com/dp/B016D5L5KE/ref=cm_sw_r_tw_dp_U_x_Y.IADbZ2G71TG