Project Description 

| TERM | PROJECT | COURSE CODE | WEIGHT |
| --- | --- | --- | --- |
|  | Internet of Things | CSN105 | 15% |

Project Objectives

This project allows you to explore and research a topic “beyond the classroom”. The purpose of this project is to investigate and construct an Internet of Things solution to solve real world problems. Use the following link from Wikipedia to gain a better understand of an Internet of Things: <https://en.wikipedia.org/wiki/Internet_of_things>

Upon completion of this project, you will be able to perform the following:

* Investigate an IoT solution to solve real world problems
* Construct an IoT solution to solve real world problems

Project Requirements

* Raspberry Pi 3 or higher
* Involve a sensor to obtain data
* Involve transmitting data over a network
* Data can be accessed using other devices on a network (i.e. computers, smart devices)
* Successful completion of this project is required to earn a credit in this course

Project Instructions

There are 4 parts to this project:

1. Project Idea [Video: [Explanation](https://web.microsoftstream.com/video/54049f84-4f5f-4f07-a568-782bc266c951)]
2. Project Schedule [Video: [Explanation](https://web.microsoftstream.com/video/5b0752e7-0411-4af8-bab6-397169ea22ef)]
3. Project Features [Video: [Explanation](https://web.microsoftstream.com/video/d5473f2f-0e96-462b-a632-ebce229641a6)]
4. Project Demonstration [Video: [Explanation](https://web.microsoftstream.com/video/9954f421-8d6e-4028-9512-ec05f68f4dd0)]

You may use online resources to find project ideas. Use the resources below to find a project you want to construct.

**Resources:**

[hackster.io](https://www.hackster.io/raspberry-pi/projects)  
[pimylifeup.com](https://pimylifeup.com/)  
[instructables.com](https://www.instructables.com/circuits/raspberry-pi/projects/)