





For this assignment you are required to:

Create a working IoT project using a suitable distributed version control system.

Present and communicate your work in a clear, correct manner



Begin to develop a digital portfolio.



Assessment will be based on technical (e.g., features), communication, organisational and presentation skills.



100% CA

1 overall project

### Requirements



### Timeline



### 3<sup>rd</sup> March(week6)



### 1-9 May (week12/13)

Proposal document (for 3<sup>rd</sup> March)

- One page document with general concept.
- Github repo

Presentation and interview

- Full submission.
- Present your work.

#### Interim Review

- Updated Readme.md
- Feedback on progress



31st Mar (week9)

# Grade Spectrum

|                                 | Combined knowledge (25)  | Working Artifact (25)   | Digital Portfolio (25)  | Communication (25)   |
|---------------------------------|--|---|---|--|
| Base<br>(40-49)                 | 2 programme strands present in output. Basic knowledge of each exhibited.  | Basic working artifact consisting of a single device.               | Basic structured portfolio. No coherent structure                           | Minimal (1) communication resource used (simple read me).                                    |
| Good<br>(50-64)                 | apply concepts from more than two modules/strands                          | Working artifact that connects >= two devices.                      | Well structured portfolio in source control.                                | Portfolio includes clear presentation, documentation.  |
| Excellen<br>t (65-<br>80)       | >2 strands as above and including more advanced knowledge and concepts.    | All above, multiple device types to provide functional application. | Continuous update and progression of portfolio. Public site.                | In addition, additional communication resources (e.g. instruction video, learning resources) |
| Outstan<br>ding<br>(80-<br>100) | All above, including selfacquired knowledge over and above module content. | All previous to excellent level.                                    | All the above including advanced tools and features (e.g. branches, forks). | All the above, accessible project platform (e.g. web site)                                   |



## Possible Theme: Energy Efficiency

- Government launched campaign to <a href="encourage">encourage</a> <a href="encourage">energy efficiency</a>
- Increase in renewables/wind energy production
- Optimal to use high energy appliances:
  - When outside peak hours
  - When renewable energy generation is high (e.g. Windy and/or Sunny)
- IDEA: Create an IoT device that identifies optimal time to use high energy consuming devices.
  - Encourage better practices