



Project II: Assignment Specification

Assignment Specification
Produced by: Dr. Frank Walsh

Context



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

Propose

Propose a project

- High level concept: Title; Description; Tools and Tech.

Model/ implement

Model/implement a solution to your proposal

- Use the knowledge, skills and practices from other modules

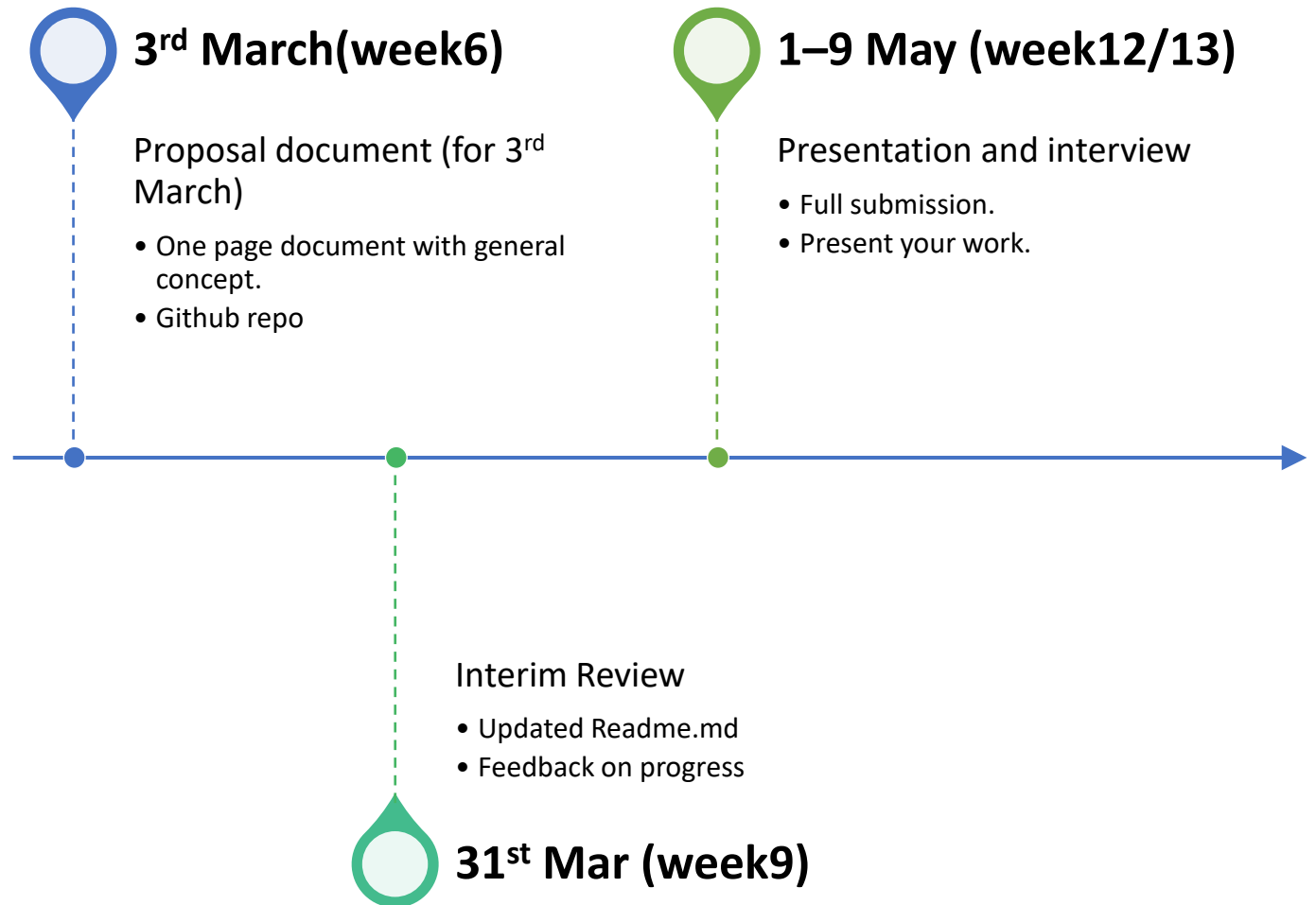
Version Control

Use a suitable version control system to manage your portfolio of "artifacts".

Communicate

Produce clear documentation and/or training material for your project (e.g. project report, user guide, sushi cards)

Timeline



Grade Spectrum

	Combined knowledge (25)	Working Artifact (25)	Digital Portfolio (25)	Communication (25)
Base (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 (50-64)	apply concepts from more than two modules/strands..	Working artifact that connects \geq two devices.	Well structured portfolio in source control.	Portfolio includes clear presentation, documentation.
Excellent (65-80)	>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)
Outstanding (80-100)	All above, including self-acquired 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 Use

- Government launched campaign to [encourage energy efficiency](#)
- 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)
- IDEAS: Create an IoT device that identifies:
 - Optimal time to use high energy consuming devices.
 - Encourage use of green transport