

Assignment 2 Specification: IoT Platform, Messaging & Analysis

IoT Standards and Protocols

Produced by: Dr Frank Walsh

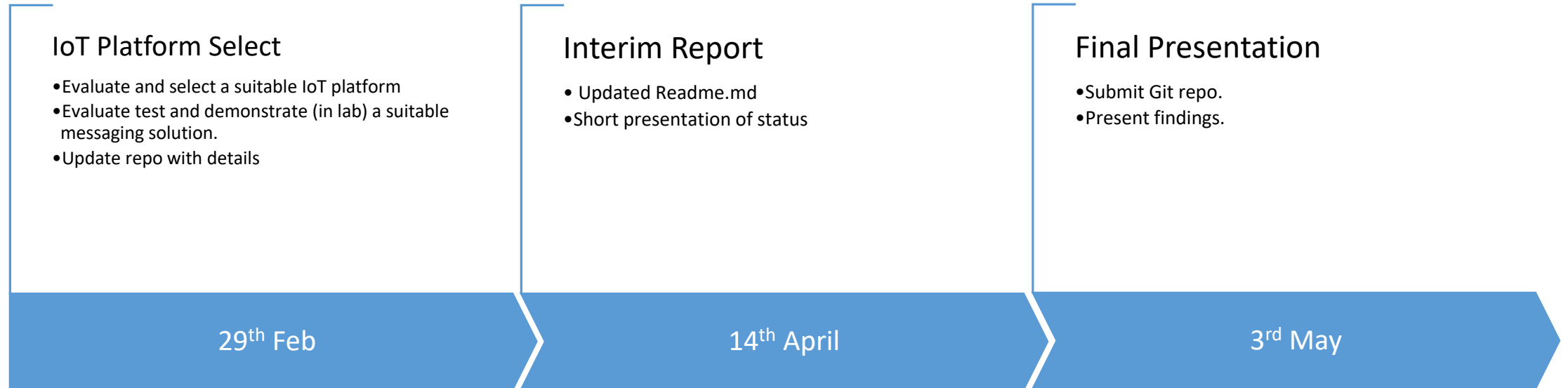
Context

- 100% CA module
 - Project ethos (2 assignments – ideally 1 overall project)
- For this assignment you are required to:
 - Extend Assignment 1
 - Incorporate IoT Platform
 - Present and communicate your work in a clear, correct manner.
- Include the output in your “digital portfolio”(e.g. git).
- Project will be assessed on it technical (e.g., features) content, complexity, applicability to IoT domain and execution.

Requirements

Design	Design domain-specific IoT solutions (e.g. health care)
Apply	Apply suitable IoT protocols and standards.
Model/ implement	<p>Model/implement a solution to your proposal</p> <ul style="list-style-type: none">• Use the knowledge, skills and practices from other modules• Should be scoped correctly – can't build a production standard solution in a few weeks.
Present/ curate	Present/curate your project.

Timeline



Grade Spectrum

	Combined knowledge (15)	IoT Technologies (35)	IoT Solution (35)	Communication (15)
Base (40-49)	2 programme strands present in output. Basic knowledge of each exhibited.	Physical/Data link layer solution. Minimal devices	Basic solution that may form basis of overall application	Minimal (1) communication resource used (simple read me).
Good (50-64)	apply concepts from more than two modules/strands..	Wireless protocols. >1 protocol. Interconnected devices/Nodes.	Solution with clear IoT and Domain application. Could form basis of prototypical application.	Portfolio includes clear presentation, documentation.
Excellent (65-80)	>2 strands as above and including more advanced knowledge and concepts.	Suitable connection to and use of IoT platform. Suitable utilization of lightweight messaging.	IoT solution of prototypical standard. Used to evaluate overall suitability for production systems	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. Excellent Use of IoT specific platforms	Novel solution of clear applicability to specific domain. Could result in employment offer.	All the above, accessible project platform (e.g. web site)