INFOB3IT 2024/2025

**Assignment 2**

Group #:

Student name:

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Type: Group work

**Deadline: Thursday 10th April 2025 – 17.00**

Submit: Blackboard

Evaluation: Graded

NOTE: This is a template that can be used to deliver your work. However, you can use other formats, if you prefer as long as you remember to write your group number and student names and adhere to the description.

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| Introduction Use this section to introduce your project. Describe what makes it special, what are its features. You can briefly report the results of the study in a few sentences (e.g. the gesture set, the integration of the gestures, and the results of the usability testing).  (Up to two paragraphs) |
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| System details This section should provide some details of your system, in order to help us decide to what extent you meet the objectives. It should (briefly) document the choices that you made. These should include choices regarding libraries, watering conditions, MQTT features (the topics you used, the payload structure and values, the frequency of updates, the QoS settings, retained messages, etc.) and any other choices you deem relevant. Also, if you are using QoS levels that are different from the ones you intended to use because of library limitations, that should go into this document. And don’t forget to mention any extras you implemented!  This section should also include a clear photo of your hardware setup and some screenshots of your clients (e.g., Node-RED flow, dashboard, smartphone app, OLED screens, …). Full schematics or a state diagram are not required (but feel free to include them if you made them anyway).  This is also the place to *optionally* reflect a bit on the things that you might not have implemented but would have improved your system, as mentioned in the requirements (such as Wi-Fi configuration, security features, OTA).  (Up to 2 pages including tables and figures) |
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| Gesture Elicitation This section should report your gesture elicitation study, analysis, and results. Describe your study design (e.g., recruitment process, participant group characteristics, procedure), how you analyzed the results to come to a gesture set (e.g., grouping method, agreement scores). The section should conclude with the gesture set used in the gesture implementation section.  (Up to 2 pages including tables and figures) |
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| Gesture Implementation Describe how you implemented the gesture set in the system. Include gesture recognition techniques and constraints (e.g., glove design).  (Up to 2 pages including tables and figures) |
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| Usability testing This section should report your usability study, analysis, and results. Describe your study design (e.g., methodology, procedure, materials and apparatus used), how you analyzed the results (choose a fitting strategy for the type of data you gathered), and what the outcomes of your study are (report main findings and how you could improve the gesture set based on these outcomes).  (Up to 2 pages including tables and figures) |
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| Conclusion Briefly summarize your system, the study, and the results.  (Up to 1 paragraph)**.** |
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| Appendix You can provide additional material in this section. |
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