Milestone 1 Report

*COMPSYS 704: Advanced Embedded Systems*

*Project 1*

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# Introduction

# Brief

# Overall Conceptual design

In this section the overall intended design is explained here. A diagram expressing the overall design can be seen below at *Figure 1* .

As team, a decentralized system has been opted before, with the different functionalities of the overall system managed separately. This is due to a decentralized design allowing for a more modular design of the system. Each member of the team will be able to develop functionalities with not much concern for clashing with other team members. Additionally, this means spreads the burden of processing and running of functionalities improving overall performance. Finally, this method has security benefits as the failure of one functionality will not necessarily mean the breaking of the whole system.

The overall design is broken into <<Number>> subsystems:

* Automatic Bottling System (ABS) -
* Access Control System -
* Environment Control System (ECS) -
* Purchase Order System -

Links are used for communications between subs-systems. The system will receive data from sensors embedded within the physical environment and output signals that will drive actuators.

<<Overall design diagram here (Figure 1)>>

<<GUI here>>

# Task Allocation

Below is a table showing how each task is categorised, as well as who is currently selected to complete this task

|  |  |  |
| --- | --- | --- |
| **Task** | **Description** | **Allocated to** |
| *ABS Tasks* |  |  |
| Lip Loader |  |  |
| Bottle Unloader |  |  |
| Rotary Table |  |  |
| Conveyor Belt |  |  |
| Filler |  |  |
|  |  |  |
| *Group Components* |  |  |
| GUI |  |  |
| Report (Main Editor) |  |  |
|  |  |  |
| *Individual Components* |  |  |
| *ECS* |  | *Frank* |
| *POS* |  | *Beck* |
| *ACS* |  | *Rufaro* |