Hazard Analysis The Nursery Poject

Team #, Team Name
Student 1 name
Student 2 name
Student 3 name
Student 4 name

Table 1: Revision History

Date	**Developer(s)**	**Change**
Date1	Name(s)	Description of changes
Date2	Name(s)	Description of changes
...	...	...

Contents

[You are free to modify this template. —SS]

1 Introduction

[You can include your definition of what a hazard is here. —SS]

2 Scope and Purpose of Hazard Analysis

3 System Boundaries and Components

4 Critical Assumptions

[These assumptions that are made about the software or system. You should minimize the number of assumptions that remove potential hazards. For instance, you could assume a part will never fail, but it is generally better to include this potential failure mode. —SS]

5 Failure Mode and Effect Analysis

Component	Failure Mode	Effect of Failure	Cause of failure	Recomended action	SR	Ref
Tray Dispensing	Tray is not dispensed	Machine is unable to continue operation, tray may be damaged	(a) Tray stack software/hardware failure (b) Tray dispenser software/hardware failure (c) Parts failure	(a) Sensor will recognize if tray has not been dispensed, error message will be displayed and operator will be notified. (b) Refer to H1-1a (c) Refer to H1-1a		H1-1
	Trays placed incorrectly on conveyor	Tray is unable to move forward on conveyor, pot dispenser is unable to place pots correctly. May damage pots/trays	Trasy dispenser software/hardware failure	Guiding rods will be placed on the conveyor to centre trays into correct position. If trays are unable to move forward, error message will be displayed and operator will be notified.		H1-2
	Trays dispensed are stacked, 2+ trays dispensed at once	Tray storage becomes out of sync with pot storage, may damage pots/trays	1. Parts failure 2. Trays loaded incorrectly	1. Sensor will recognize if multiple trays have been dispensed, error message will be displayed and operator will be notified 2. Operator will be trained to properly load trays into machine"		H1-3

6 Safety and Security Requirements

[Newly discovered requirements. These should also be added to the SRS. (A rationale design process how and why to fake it.) —SS]

7 Roadmap

[Which safety requirements will be implemented as part of the capstone timeline? Which requirements will be implemented in the future? —SS]