

**Software
Engineering**

4조

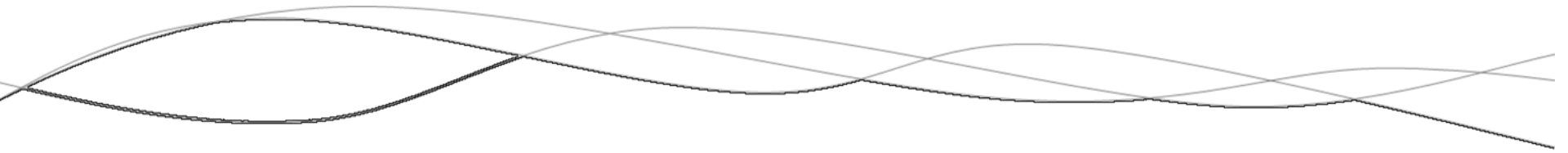
Structure Developement

10.14

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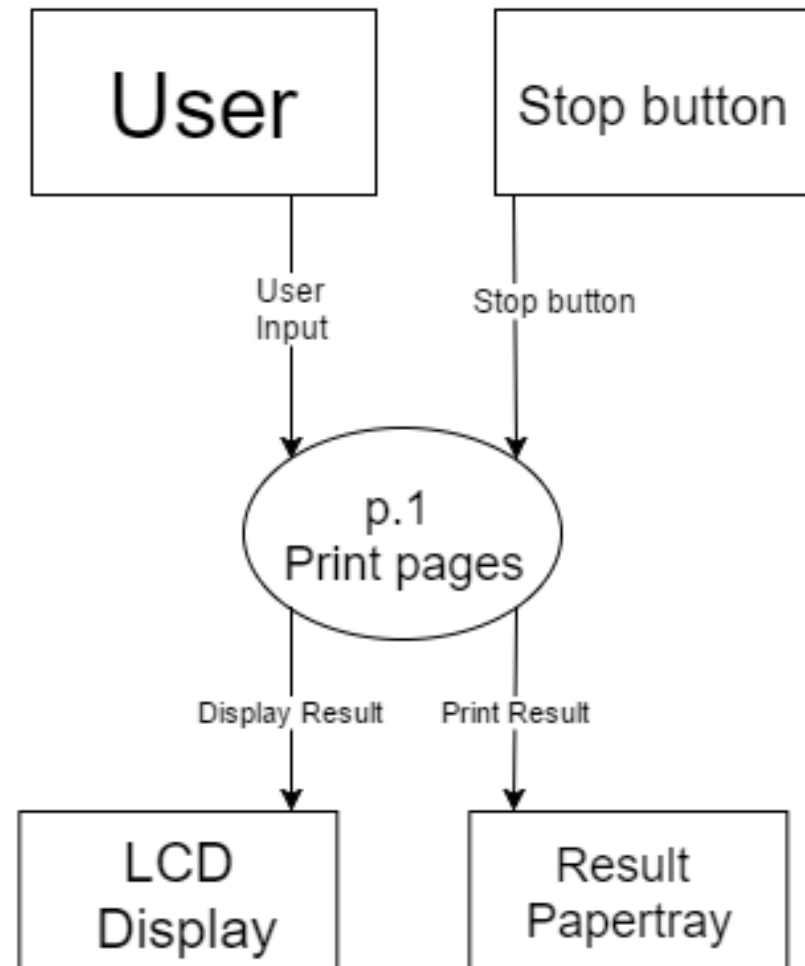
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Main 1.

DFD level 0

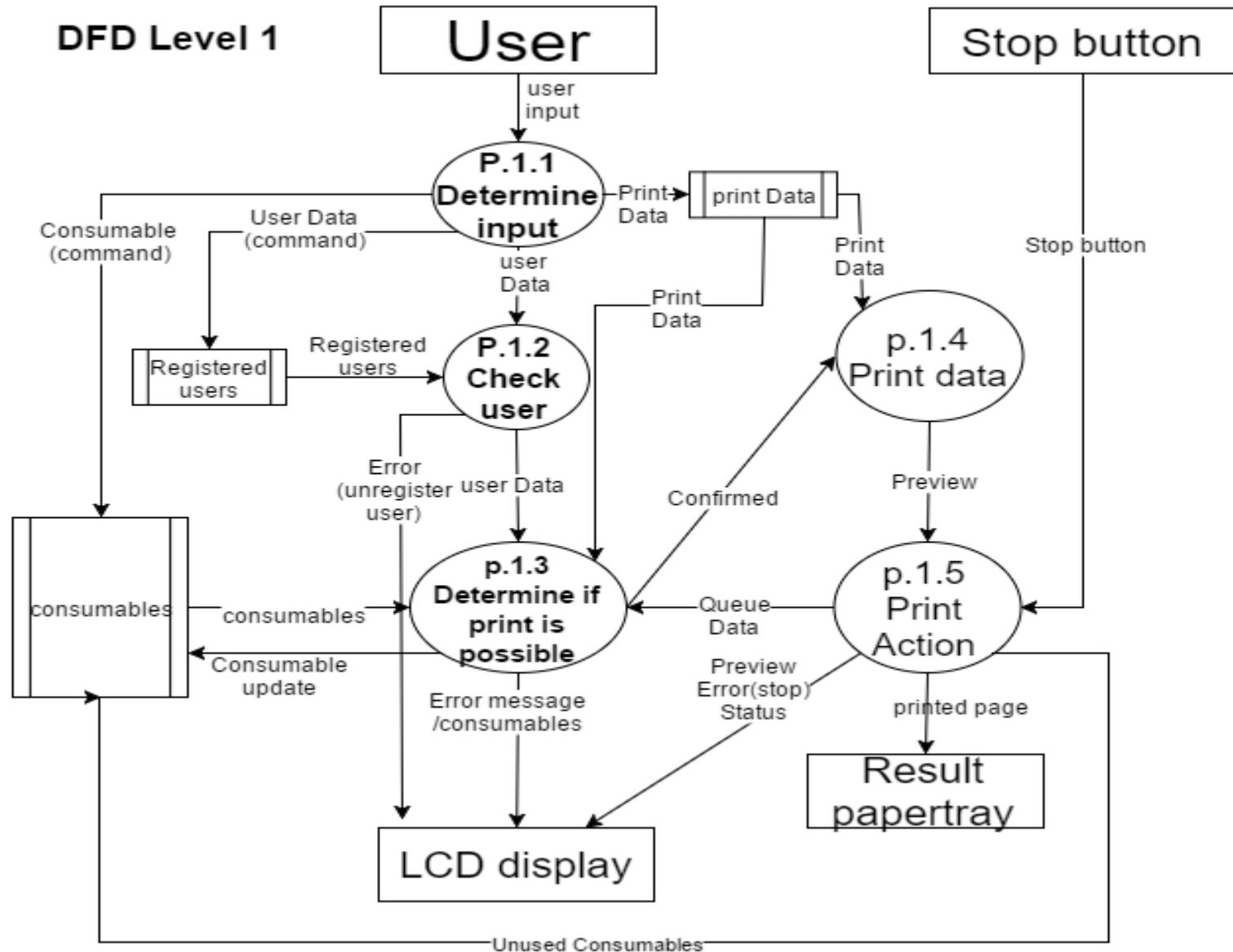


Main 1. Environmental Model 2.3 EventList

Reference No.	p.1
Name	Print pages Process
Input	User Input, Stop Button
Output	Display Result, Print Result
Description	Receives User Input to trigger the print pages process and return the results of the User Input by displays it on the LCD screen and saving the printed results in Print Result Tray

Main 2. DFD 1

DFD Level 1



Main 2. Process Specification

Reference No.	p.1.1
Name	Determine Input
Input	User Input
Output	Consumable(command), UserData(command), user data, Print Data
Description	Identifies the different types of command and executes the appropriate command for the type of command. Command type input is used to update user list and consumables amount while user data and print data is used to initiate the print function.

Reference No.	p.1.2
Name	Check User
Input	Registered Users, User data
Output	Error Message, User data
Description	Compares the received user data with the registered user list to find a match. If not found returns the error message to the LCD display. Else sends the user data to p.1.3.

Cont.

Reference No.	p.1.3
Name	Determine if Possible
Input	Consumables, User Data, Print Data, Queue Data
Output	Consumables Update, Error Message, Confirmation
Description	Calculates whether the print is possible by comparing the Consumables available to the consumables needed in Print Data, if there is not enough consumables, sends an error message to the LCD screen. It also manages the queue of print requests using a Print Queue data storage.

Reference No.	p.1.4
Name	Print Data
Input	Print Data, Confirmed
Output	Preview
Description	Makes the preview format from Print Data input when it receives confirmation.

Reference No.	p.1.5
Name	Print Action
Input	Preview, Stop Command, Tick
Output	Queue Data, Unused Consumables, Save Printed Data, Save Incomplete Print, Error Message
Description	Sets the time limit of the print request and when the stop button is not pressed within the time period, saves the result in the result papertray and updates the queue. If Stop Button Command comes within the time period, the process Deletes all queue, saves the incomplete print and updates the unused consumables.

Main 4. DFD Overall

Overall DFD

