PROCESS CONTROLLER

Low-Level Design Version Draft v0.2

Team members

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1. Introduction

Process controller is a system software which takes the input and display the output accordingly, the user can give the program input and can perform multiple operations on the given program and can display various statistics information of that process by giving the process name.

1.1 Purpose

The purpose of this document is to describe the low-level design flow of the Process Controller.

1.2 Document Conventions

TBD (To be continued).

1.3 Intended Audience and Reading Suggestions

The document is primarily intended for team members, which consists of trainees under theCapgemini Training program.

The references are:

1. System Requirements Specification Document

2. Detailed System Design

2.1 Design Descriptions:

Process controller is a system software which takes the input and display the output accordingly, the user can give the program input and can perform multiple operations on the given program and can display various statistics information of that process by giving the process name.

Main menu:

- The main menu has options to add, delete, start, kill, pause, unpause, display status of a process.
- Depending on the choice entered by the user, corresponding functions are performed
- For choice 1, the server will display the process which is added.
- For choice 2, the server will delete the process which is entered by the user in the client.
- For choice 3 , the user will be able start a process if that process is present else it will display program not found.
- For choice 4 , the user will enter the process name to kill, if process name is present kill successful else it will display no program found.
- For choice 5 , the user will enter the process name to pause, if process name is present pause successful else it will display no program found.
- For choice 6 , the user will enter the process name to unpause, if process name is present unpause successful else it will display no program found.
- For choice 7 , the user will enter the process name to display status, statistical information will be displayed.

2.3 Modules

main ():

Name	main			
Input	Parameter Name:	NA	Initial value:	NA
Output	Return value type:	NA	-	-
Description	The main function will display options to the user			
Pseudo Code	1. Display the main menu 2. Wait for user options 3. Based on user input it will move to another			

2.3.1 add_process ():

Name	add_process ():			
Input	Parameter Name:	char *uname	Initial Value:	NA
Output	Return value type:	int	-	-
Description	This program is used to add a process into the list where the user enters the process name to be added.			

2.3.2 delete_process ():

Name	delete_process ()			
Input	Parameter Name:	char*uname	Initial Value:	NA
Output	Return value type:	int	-	-
Description	This program is used to delete a process from the list where the user enters the process name to be deleted.			

2.3.3 kill_process ():

Name	kill_process ()			
Input	Parameter Name	NA	Initial value:	NA
Output	Return value type	NA	-	-
Description	In this program the process name entered by the user will be killed and if the process name is not present then it will be unsuccessful.			

2.3.4 Pause_process ():

Name	pause_process ()			
Input	Parameter Name	NA	Initial value:NA	-
Output	Return value type	NA	-	-
Description	In this program the process name entered by the user will be pause and if the process name is not present then it will be unsuccessful.			

2.3.4 unpause_process ():

Name	unpause_process ():			
Input	Parameter Name	NA	Initial value:NA	-
Output	Return value type:	NA	-	-
Description	In this program the process name entered by the user will be unpause and if the process name is not present then it will be unsuccessful.			

2.3.5 start_process ():

Name	**start_process ():**			
Input	Parameter Name	NA	Initial value:NA	-
Output	Return value type	NA		-
Description	In this program the process name entered by the user it will be start and if the process name is not present then it will be unsuccessful.			

2.3.6 display_data ():

Name	**Display_data ():**			
Input	Parameter Name	char *uname	Initial value:NA	-
Output	Return value type	int		-
Description	The user will the enter the process name and it will display all the statistical information's of that process.			

2.1 Data Flow Diagram (Level - 0)

This Level 0 is also known as context diagram, it is an abstract view with the mechanism represented as a single process with external parties. This DFD for the system depicts the overall structure as a single bubble. The incoming, outgoing indicators showing input and output data.

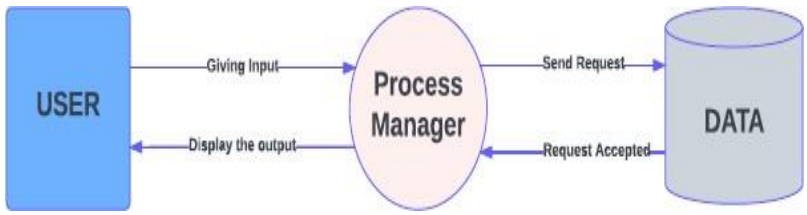


Fig 3.3 Level-0 DFD

2.2 Data Flow Diagram (Level - 1)

The context diagram is decomposed into multiple bubbles/processes. In this level, we highlight the main functions of the system and breakdown the high-level process of 0-level DFD into subprocesses.

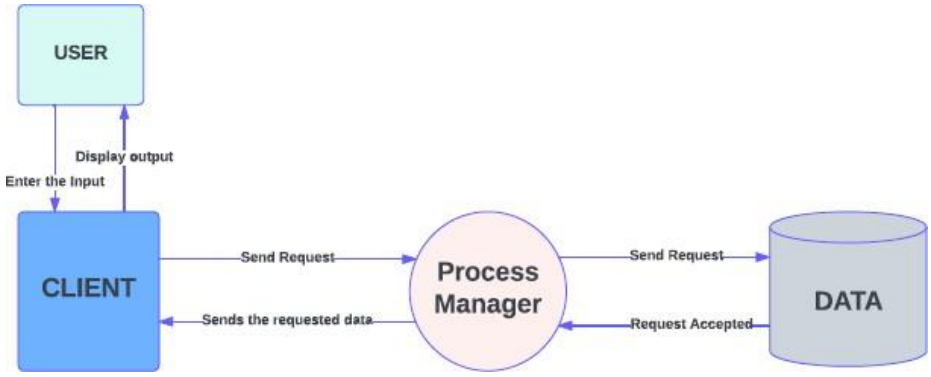
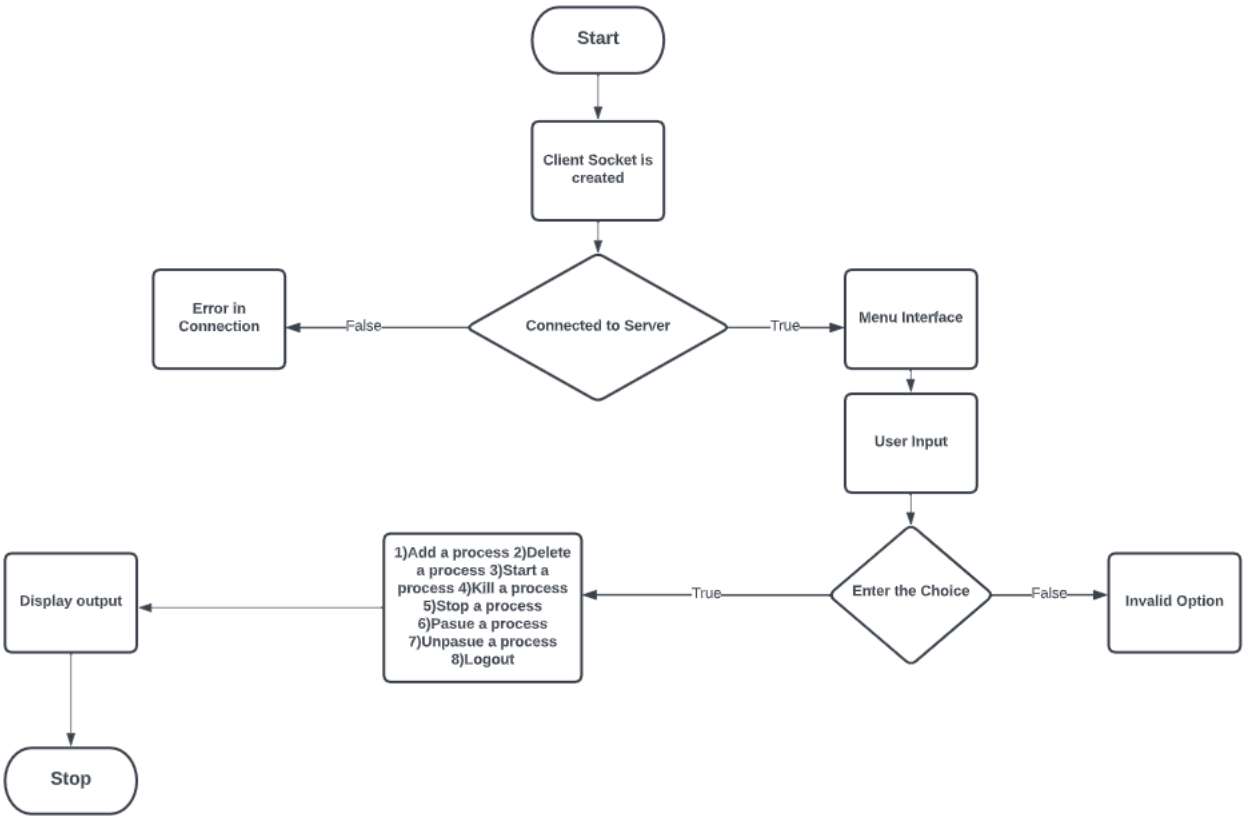


Fig 2.1 Level-1 DFD

2.2 Data Flow Diagram (Level - 1)



Description:

A data-flow chart is a way of representing a flow of data through a process or a system. The DFD also provides information about the outputs and inputs of each entity and the process itself.

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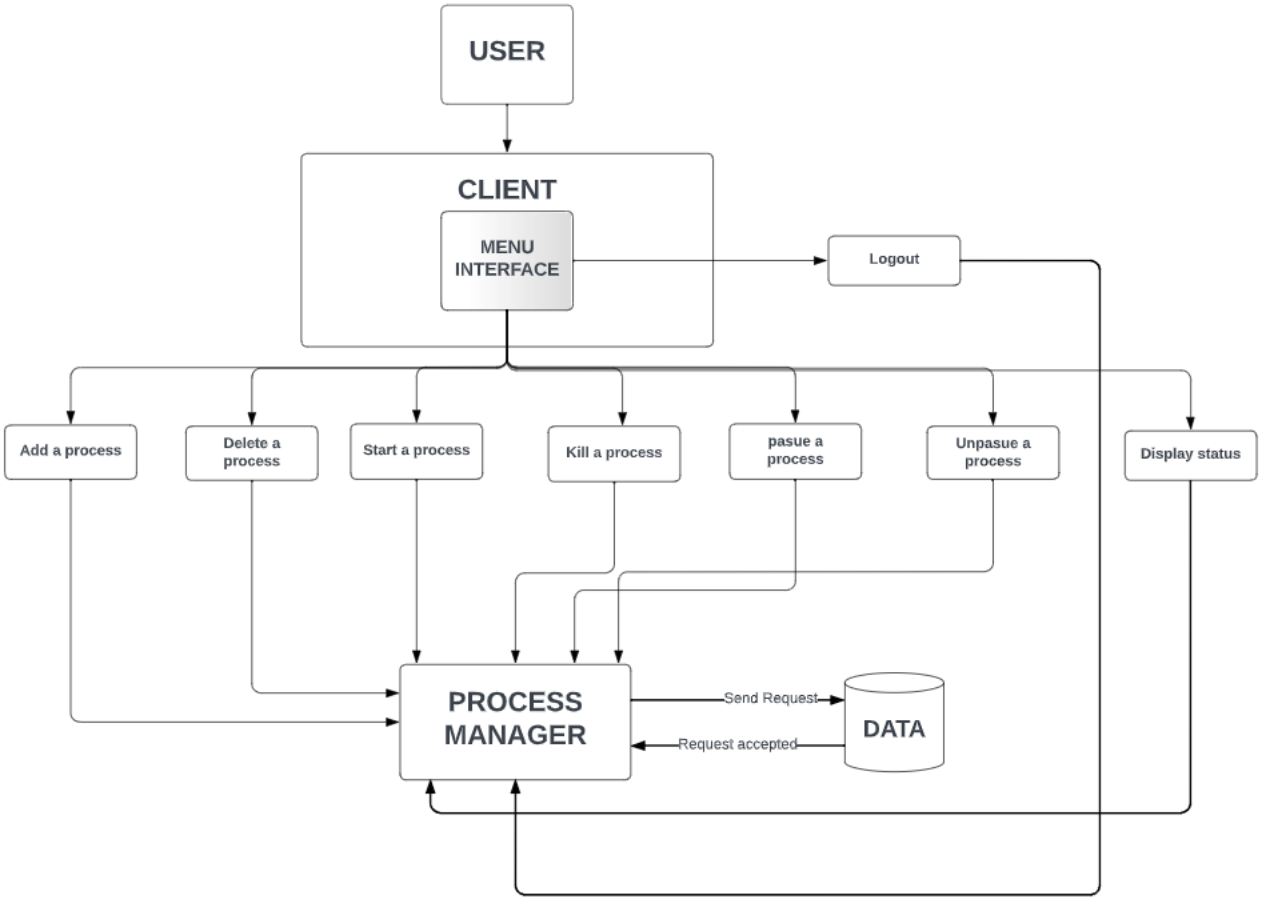

Fig 2.3 LLD