

Final Project Report

< Macro Recording System >



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EXORDIUM

**In the name of Allah, the Compassionate, the
Merciful.**

**Praise be to Allah, Lord of Creation,
The Compassionate, the Merciful,
King of Judgment-day!**

**You alone we worship, and to You alone we pray
for help,
Guide us to the straight path**

The path of those who You have favored,

**Not of those who have incurred Your wrath,
Nor of those who have gone astray.**

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CHAPTER 1
Gathering & Analyzing Info

1.1 Scope of Project:

Macro Recording System is a Desktop Based Application Which Helps Users to save and record the input sequences and play them as well. Macro recording system will save a lot of time on repetitive tasks. Macro Recorder system can be used to automate ANY activity in ANY windows application on predefined schedule.

- Automate all kinds of repetitive tasks: auto-fill forms generate reports etc.
- We can use the task that we have saved, using the keystrokes manually.
- Automate software testing.
- Perform system maintenance with Macro Recorder System.
- Auto-login to your online accounts (web-mail, forums).
- Create tutorials and presentations with this macro recording system.

Our Application Not Only record the actions, it also logs all the activities and events , The Application will have an option to start the application at windows start-up , if enabled the system will automatically record all the activities when user logged in .

1.2 Functional Requirements:

ID	Requirements
1	Our Application have desktop interface and application services starts as windows starts
2	When User logged in, user may be able to see the system tray icon
3	User may see the application interface by clicking the tray icon , which interface includes , RECORD, PLAY, OPEN,SAVE,SETTING buttons and logging sequences in form of the table
4	When user clicks RECORD Button , system will Minimize the application screen and starts recording keyboard and mouse events
5	As new event occurred , the system will update the table data which includes the events(KEYBOARD,MOUSE)
6	When RECORD Button pressed, The RECORD Button changes to STOP , When clicked the system will stop recording
7	When clicked on Save Button , the system will ask the user to save the sequence and asked for macro name in which the event sequences are saved
8	When Name Entered , the system will save the sequences into a file
9	When clicked on PLAY button , the system will ask to play the sequence now or a scheduled time , The system will minimize the application
10	System will play the macro as per user requirement
11	When PLAY Button Clicked , The system will add the stop button , when clicked , system will stop the macro to be played
12	When open button clicked, the system will ask user to browse the macro file
13	Macro file selected , system will open the macro file and load the sequences into the logging table
14	When SETTING button clicked , system will display a window which includes Thread priority options(LOW,NORMAL,HIGH) and a check box to enable/disable the “AUTOMATIC STARTUP” and save setting button
15	When clicked for “SAVE” button the system will update the setting
16	User will be able to associate a hotkey for a specific event in the macro , which can be saved in to the macro file

1.3 Non-Functional Requirements:

<u>ID</u>	<u>Requirements</u>
1	The system will have a minimum hardware requirement
	PROCESSOR: INTEL PENTIUM 4
	RAM : 256 MB
	HDD SPACE: ATLEAST 500 MB of free disk space
2	The system will have a minimum software requirements
	OS : MICROSOFT Windows XP SP 3
3	Our Application enable users to update the windows thread priority level for the application
4	Our Application Enable user to save the events by Mouse and Key board in a macro
5	The system will save the macros in human readable files

Limitation:-

The following key combinations cannot be recorded: Ctrl-Alt-Del, Ctrl-Esc, Alt-Tab, and Alt-Esc.
Ctrl-Alt-Del cannot be sent by the Mouse and Key Recorder. Reason: Microsoft security

1.4.1 Use Case Diagram(s):

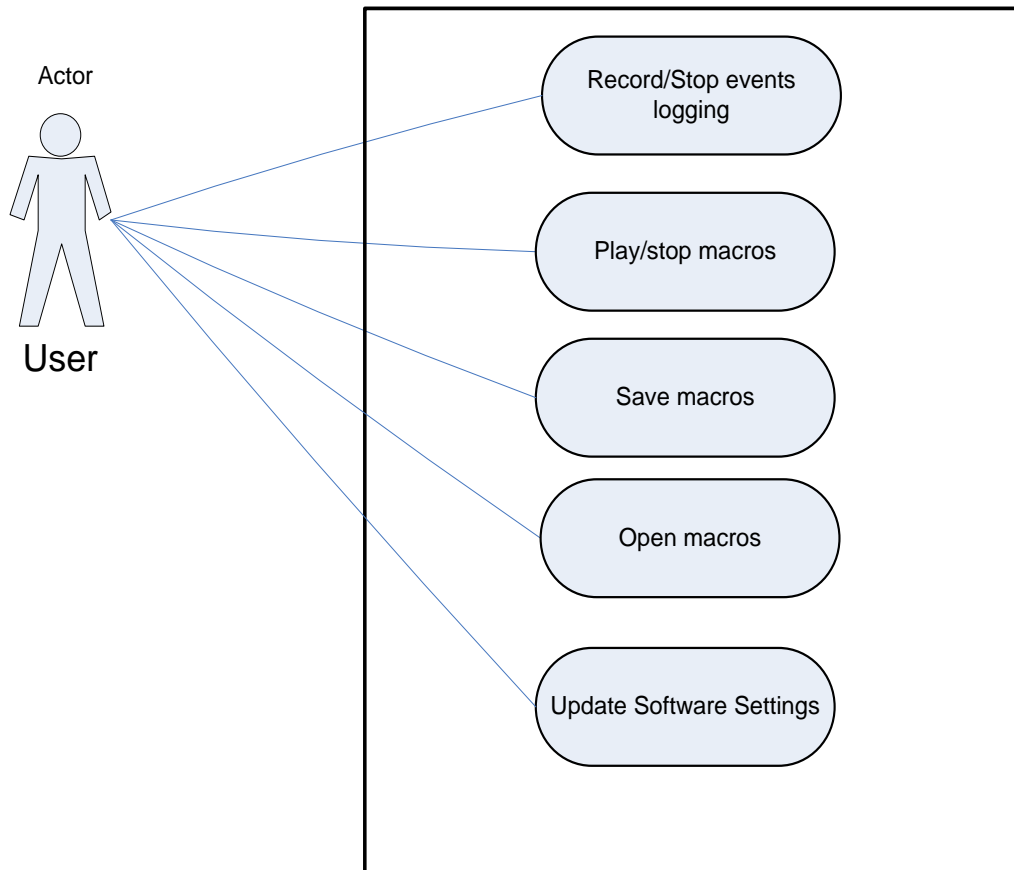


Figure -1 User Role in Macro Recording System

1.4.2 Usage Scenarios:

Use Case Title	Record/Stop events logging	
Use Case Id	MACRO-01	
Requirement ID	4-6	
Description: User may run the application to record and stop events logging.		
Pre Conditions: User must have run the application to see the record button.		
Task Sequence	Exceptions	
1. User may click the record button to start the event recording.		
2. Application will hide the record button and minimize the application and display a stop button.		
3. System will start the event recording including key strokes and mouse events.		
4. User may stop event logging by clicking the stop button.		
Post Conditions: System have successfully recorded and logged the events in the events table.		
Unresolved issues:		
Authority: User		
Actor: User		

Use Case Title	Play/Stop macros	
Use Case Id	MACRO-02	
Requirement ID	9-11	
Description: User can play the current or saved macro by clicking the play button.		
Pre Conditions: User must have already opened the macro file or currently recorded any events.		
Task Sequence		Exceptions
5. When user clicks the play button, the system will ask for to the play the current macro now or add schedule to run the macro.		If there is no macro file open, the system can not play any event and display an error.
6. Upon selection of play now the system will minimize the application and start playing macro, and display a stop button to stop the currently playing macros.		
7. Upon selection of schedule the system will ask and specific date and time, to run a macro and add the schedule to scheduled task.		
8. User can stop playing macro by clicking the stop button.		
Post Conditions: By clicking the stop button, the system stopped the currently playing macros.		
Unresolved issues:		
Authority: User		
Actor: User		

Use Case Title	Save macros
Use Case Id	MACRO-03
Requirement Id	7-8
Description: User can save the currently recorded events into a macro file.	
Pre Conditions: User may have recorded any event in order to save a macro file.	
Task Sequence	
9. When clicks save button, system will ask save file and file name.	
10. When file name entered the system will save a macro file.	
Post Conditions: system successfully save the macro file.	
Unresolved issues:	
Authority: User	
Actor: User	

Use Case Title	Open macro
Use Case Id	MACRO-04
Requirement Id	12-13
Description: In order to play a macro user may open a macro file already. So open button can be use to open a macro file.	
Pre Conditions: User may run the application to open already existing macro.	
Task Sequence	
11. User can open macro by clicking open button.	
12. When clicked, the system will ask to browse a macro file.	
13. When selected the system will open the macro file.	
Post Conditions: System have successfully open and loaded the macro file.	
Unresolved issues:	
Authority: User	
Actor: User	

Use Case Title	Update software setting
Use Case Id	MACRO-05
Requirement Id	14-15
Description: User can update software setting at any time by clicking setting button.	
Pre Conditions: User may run the application to update software setting at any time.	
Task Sequence	
14. When clicked on setting button system will display a window which includes automatic startup and thread priority option.	
15. When clicked save button in setting window, system will save settings.	
Post Conditions: System have successfully updated windows services and window thread priority option for application.	
Unresolved issues:	
Authority: User	
Actor: User	