
# User Manual

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## 1 Introduction

Thanks for downloading Simulizer! Simulizer is a piece of software that allows you simulate and visualize (hence Simulizer) the running of a MIPS processor in the comfort of your own home. With Simulizer, you don't get to just run programs, you get to write and edit files with our own integrated text editor. As well as this, Simulizer provides a whole range of options to help you understand your MIPS code (and the processor) that little bit more. If you want to see your code moving through the CPU, then choose our CPU visualization! If you want to see your algorithm running to check you've got you logic correct then a high-level visualization is the option for you. If you've never been able to get your head round pipelining then nows your chance, Simulizer visualises that too!

Simulizer also provides you with loads of handy debugging tools, such as a logger for standard, error and debug streams, as well as windows to let you peak inside the memory/registers of the CPU. Another really clever thing included is a JavaScript based annotation system. Gone are the days of adding print statements throughout your code, instead you can put it in the comments. You can control the high level visualizations, as well as large amounts of the CPU in just a little bit of JavaScript!

Finally, enjoy your time using Simulizer!

# Contents

# 2 User Interface

The user interface is designed to be as configurable as possible, so that the application can fulfil your needs. Don't need to visualise the internals of the CPU? Just close it. Need to make the editor a bit bigger? Then resize the editor. It's very simple.

## 2.1 Menu Bar

## 2.2 Internal Windows

## 2.3 Layouts

Layouts determine the configuration that all the Internal Windows are in. They allow you to quickly switch between different arrangements to optimise your workflow.

### 2.3.1 Loading a Layout

### 2.3.2 Saving a Layout

If none of the included layouts are up to your standards then why not make your own. Add/Remove and rearrangement the Internal Windows until it is in a configuration that you are happy with. You can then save the layout by clicking Layouts -> Save Layout.

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Enter a name for this new layout. In this case we called the layout XXX. Now click the save button and that new layout should show up on the Layouts drop down menu.

## 2.4 Themes

# 3 Editor

# 4 Annotations

# 5 High-level Visualisations

# 6 Assembler

# 7 Low-level Visualisations