# Inkscape

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# Project Refactoring

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## OVERVIEW

I am a sophomore pursuing Electrical Engineering in NUST. I have been programming in C/C++ for 2 years in my favorite Notepad++ and Visual Studio IDE, currently studying C++11. I also have a foundational knowledge of Qt, that's why it will be easy for me to learn GTK+ and develop for Inkscape.

## WHAT I DO WITH INKSCAPE

I first heard about Inkscape when I was learning Blender some 2 years ago. I have made a little finite-state machine in Inkscape for my Micro-processor Systems Project. It is a brief FSM as you can see below, however, I am currently working on my Microprocessor Systems Project final FSM that will include lot of details.
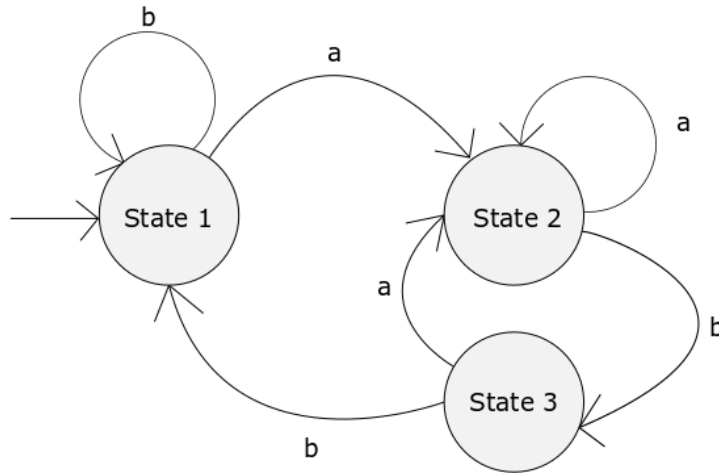
## WHY I WANT TO JOIN INKSCAPE

I want to join Inkscape for my hands-on open source development learning from a decent ongoing project like Inkscape. Also it will be a great opportunity to work under the banner of Google. More importantly, reason for doing this is not just GSoC but my passion for programming in General. I would participate in Inkscape after GSoC also for my understanding of open-source and how code should be developed and build for complex systems and project that involve a lot of contributors and volunteers.

## SUMMER PLANS

It is my first open-source project, and Inkscape is the only organization I am applying to. In addition to GSoC, I plan to take course on Certified Ethical Hacker by EC-Council in this summer in Al-Khawarizmi Institute of Computer Science in the summer vacation.

## CONTRIBUTIONS

I am working actively on Gitlab to contribute as much as I can. I am trying to contribute more, I am continuously testing Inkscape to find bugs so that I can report

it to community. I am understanding codebase, reading developer wiki and To-do's projects list.

## PROJECT — Issues and Solutions

- I want to work on refactoring to make Inkscape directory structure look cleaner and simpler. I am crawling over the Inkscape Codebase to know how Inkscape works. Of course  there is a strong need to make subdirectories in order to make project hierarchy simpler to understand and structurally more meaningful.

## WORK DISTRIBUTION TIMELINE

WEEK 1 → Creating Canvas Directory inside src/display

WEEK 2 → Creating Drawing Directory inside src/display

WEEK 3 → Creating Common Directory inside src/display

WEEK 4 → Moving Widgets to ui/widgets/legacy

WEEK 5 → Moving svg to util/svg

WEEK 6 → Creating color Directory inside src/util

WEEK 7 → Work on 'helper' Merge with util

WEEK 8 → Continue work on 'helper' merge with util

WEEK 9 → Creating Numeric Directory inside src/util

WEEK 10 → Private Data Members in SPI::Base and Derived Class

WEEK 11 → Continue work on Private Data Members in SPI::Base and Derived

WEEK 12 → Make Private Data Members in other Directories