The Linux Foundation - Common Print Dialog Project
Google Summer Of Code - 2017

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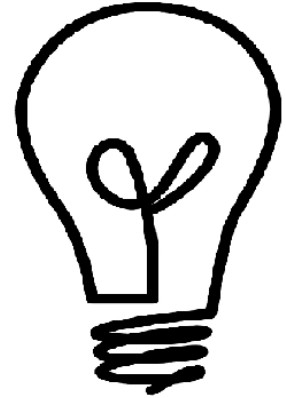THE **LINUX** FOUNDATION

Objective:

- To make printing easy for the users of desktop systems and mobile devices.

- Develop a well-designed print dialog where one can easily find the right printer under the available printers, set general, printer-specific, and document-specific options, preview the printout, and send the job.

- Consistence between applications, printing should work the same way from every application, the print dialog should be the same all over the system.

- Users get access to all printers (***network\USB\IPP\Google Cloud Print***) and all print options from any desktop application.

- Meant to be contributed to the appropriate upstream projects so that all Linux distributions will get improved by this.

Initial Idea:

- To have separate Print Dialogs each for *gtk* and *qt*.

- Separate *CUPS*, *IPP*, *Cloud Print* backends for *gtk* and *qt*.

- *DBus* layers for communication.

Reference:

- Using Canonical's design for the CPD: https://wiki.ubuntu.com/Printing

- Using the D-Bus code written in earlier GSoC:
  https://wiki.linuxfoundation.org/openprinting/cpdapi

Current Plan

Based on the announcement from Canonical to drop Unity 8 and the current development at GNOME to come up with a new *gtk* CPD within 2yrs, the initial CPD idea had to be changed.

- No development of *gtk* CPD. Main concentration to be on *qt*

- Reuse parts of Unity 8 code already developed by Canonical: (https://launchpad.net/ubuntu-printing-app)

- Modify the *IPP, Google Cloud Print* Backend code written by GNOME and make it use for *qt* CPD: (https://git.gnome.org/browse/gtk+/tree/modules/printbackends)

- Writing a patch for Libre Office.

Student Selection Process:

- Student selection process started from *Jan 2017* much before GSoC announcement.

- Computer Science departments of premier universities were approached.

- A record application of near about *65* students received from different universities to work on Open Printing projects.

- After a series of interviews and assignments, *7* students got selected and the batch was ready much before Google opened their window for student application.

- Students were given basic training on the code specially CUPS and the backends to make them accustomed to the code.

Selected Students:

SI	Name	University	Experience
1	**Yash Srivastav**	IIT Kanpur	Contributes to open source regularly. Experienced in C, C++,CSS, Shell, Python and JS.Seems to be a good candidate.
2	**Rithvik Patibandla**	IIT Kanpur	Experienced in Linux, Python, C, Posix(API), HTML, CSS, JavaScript, SQL, PHP.
3	**Nilanjana Lodh**	IIEST	C , C++ , Java (pro client), Python ,SQL (intermediate) HTML, CSS, LISP (familiar). Seems to be a good candidate.
4	**Anshul Gupta**	IIT Bombay	Regular Open Source contributor. Has couple of publications.Bit experienced in GTK. Has already started working on Google Print backend.
5	**Abhijeet Dubey**	IIT Bombay	PHP, MySQL, HTML, CSS, Bootstrap3, Laravel4, Javascript.
6	**Sahil Arora**	IIT Mandi	Good in C, C++ and Python. Active Open Source contributor.

Mentor List:

Sl	Name	Details
1	Till Kampeter	LF Org Admin (Canonical).
2	Aveek Basu	LF Org Admin (Lexmark).
3	Danny M Brennan	AIX/Linux/Mac System Engineer at IBM & ALSO Print Engineer for KP enterprise printing.
4	Dongxu Li	CAD developer, and was a mentor for another project(LibreCAD) in the past 3 years.
5	Felipe Borges	Currently at Red Hat and works on GNOME printing stack. Has prior experience working as a GSoC Mentor.
6	Themia Bandara	Currently at Millennium IT and has prior experience of working as a GSoC mentor.

Project Breakup:

SI	Name	Assigned Area	Assigned Mentor
1	Yash Srivastav	DBus Integration & Libre Patch	Till Kamppeter
2	Rithvik Patibandla	QT GUI & QT Patch	Dongxu Li\Themiya
3	Nilanjana Lodh	CUPS Backend	Till Kamppeter
4	Anshul Gupta	QT GUI & QT Patch	Dongxu Li\Themiya
5	Abhijeet Dubey	Google Cloud Print Backend.	Felipe Borges
6	Sahil Arora	IPP Backend	Danny M Brennan

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Q & A

Thank You !!

For any further queries, please feel free to get in touch:

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