

Kiwix GSoC Contributor Proposal



Summary

Name: Ajay Kumar

Portfolio: <https://itzajay.live/>

With this proposal, I aim to enhance WP1 by introducing the following features:

Combinator Builder: Combinator builder is a tool that can be used to merge various selection-building methods that will lead to more customizable experience.

Scheduled selections or ZIMs: This can be described as a system that enables periodic automatic processing of selections into downloadable ZIM files.

Owner: mailto:ajay7007@gmail.com

Approver: mentors, admins

Status: For Review

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Project Abstract

WP1 is a bot and website dedicated to aiding Wikipedia editors by providing structured tables that help determine article priorities within Wiki Projects. Additionally, WP1 offers tools to create selections for offline Wikipedia access via ZIM files. With this proposal, I aim to enhance WP1 by introducing the following features 1. Combinator Builder and 2. Scheduled selections or ZIMs.

Background

WP1 was developed to address the need for structured guidance in Wikipedia's vast ecosystem, helping editors prioritize articles within WikiProjects. Initially conceived as a bot that generated tables to assist in editorial decision-making, WP1 has since expanded into a website offering tools for creating and managing selections of Wikipedia articles. These selections are instrumental in curating offline versions of Wikipedia via ZIM files, ensuring accessibility even without an internet connection. With the growing reliance on automated processes and more diverse selection-building methods,

Design Ideas

The design of both the Combinator Builder and Scheduled Selections/ZIMs aims to prioritize flexibility, automation, and user-friendliness. The Combinator Builder will feature an intuitive interface that enables users to merge different selection-building methods seamlessly, ensuring compatibility with existing WP1 tools. A structured data model will be implemented to support customizable selection configurations while maintaining efficiency. For the Scheduled Selections/ZIMs system, a robust backend scheduling mechanism will automate periodic updates of selections, reducing manual effort while keeping offline Wikipedia content fresh. The user interface will allow users to set intervals, provide necessary inputs, and receive timely notifications, ensuring a streamlined experience.

Code Affected

<https://github.com/openzim/wp1>

<https://github.com/openzim/wp1/tree/main/wp1-frontend>

Related Work

After conducting an extensive survey of existing selection-building and offline Wikipedia solutions, I identified several tools that provide functionalities like WP1. While some platforms offer article selection features based on predefined lists or manual input, they often lack the flexibility to merge multiple selection methods dynamically. Additionally, offline Wikipedia solutions, such as Kiwix, allow users to create ZIM files, but they require manual updates and do not provide automated scheduling for fresh selections.

Pre proposal Work

Through my initial exploration of WP1, I identified key areas for improvement, particularly in selection-building workflows and automated ZIM creation. Existing selection methods function well individually but lack a unified approach to combining them seamlessly. Additionally, the manual process for requesting ZIM files can be streamlined with automated scheduling, reducing user effort while ensuring up-to-date offline Wikipedia access.

Schedule of Deliverables (timeline)

Select the period and dates during which you will be working on a medium or large project and plan the deliverables accordingly and if you need extended timeline to complete the work. Write a weekly plan and estimates on working on the deliverables. Please update the dates below based on this year's timeline.

May 8 - June 1 (Community Bonding Period)

- [Community Bonding Period](#) | Understanding project requirements, familiarizing with WP1 architecture, and setting up the development environment.

June 2 - July 18 (Phase I)

- Development of data model and frontend UI for the combinator builder and integrate combinator builder into WP1 and conduct testing.

July 19 - Sept 1 (Phase II)

- Develop the scheduling system for ZIM file creation and implement email notification system and privacy policy.

Sept 1 - November 9 (For Extended Timelines)

- Will Conduct final testing, documentation, and project submission.

Communications

I will maintain regular communication via GitHub, email, and instant messaging (Slack/Discord). My work schedule is 20-25 hours per week, primarily during evenings (IST) and weekends. I'll provide weekly updates and attend check-ins to discuss progress.

For delays, I'll promptly inform my mentor, propose solutions, and adjust timelines while prioritizing critical tasks. Regular documentation, frequent pull requests, and proactive engagement will ensure steady progress throughout the project.

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About Me

Myself Ajay, I am an undergraduate student, tech enthusiast with a strong analytical mindset and problem-solving skills. I specialize in Python, JavaScript, and SQL, building efficient web solutions using MongoDB, Express.js, React.js, and Node.js. Passionate about learning and optimizing workflows, I enjoy tackling challenges and developing scalable, user-friendly applications

Here are my profiles:

GitHub: <https://github.com/A-JA-Y>,

LinkedIn: <https://www.linkedin.com/in/ajay-kumar-358758227/>,

Instagram: https://www.instagram.com/sir_rrolex/,

Twitter/X: https://x.com/sir_rrolex

Prior Experience with open source

*I am a very newbie to open source, but I have been trying stuff for a long time.
Here is my GitHub profile: <https://github.com/A-JA-Y>*

Why Kiwix?

I found out that Kiwix is the organization that fits perfectly my criteria of interest and there are lot of things to explore like Kiwix is doing some sort of different and out of the box stuff, that really intrigued me and I chose Kiwix to start off my open-source journey.

Feedback from Kiwix

If you read this document please provide your short general feedback in the section below. Please also feel free to make comments above.

Username	Date	Comment