

xxRFP-2022-006

Feed Me: RSS notifications over xx network

This xx foundation request for proposals will fund creation of Feed Me, an open source tool to regularly read an RSS feed and notify about changes or updates. This tool is inspired by [RSS readers \(also known as aggregators\)](#), which can read RSS feeds published by individual websites and notify you of new entries on an app or program. The xx network can offer protection when reading RSS feeds by obfuscating who is reading them, and notify the interested party/parties via xx messenger of changes.

The xx foundation is offering a competitive bidding process to complete this work, with independently compensated phases. The [selection process](#) will analyze each phase individually according to the response contents, the proposed compensation, and the proposed final deliverable dates and contents. Proposers are expected to propose for all phases.

Requirements

When a user installs the Feed Me app, it will ask the xx Messenger for permission to use the user's transmission identity in order to send requests to read and write to the Feed Me network bot. The user can request the bot monitor a feed using a [single use channel](#) via the [REST-like API](#) provided in the SDK. The user can opt to be notified only of new entries, or to be notified regularly with the latest content. The Feed Me bot will forward the RSS feed as an asymmetric channel and allow the user's client to pick up the messages. The bot should remember these channels' information, so that the bot can reuse the same channel for the same feed to other users. The bot will create the channel, store the information about it, and forward it to the requester.

All proposals, in addition to a protocol design for Feed Me, must include a User Interface (UI) design. The UI should include mechanisms to write to the Feed Me bot's RSS feed list as well as read from it.

The Feed Me app must never share unnecessary data with third parties. Server components (if any) must only be accessed through cMix on the xx network. Proposals should address how these properties are achieved (e.g., specific libraries, protocol sketch, etc) as well as provide a high-level description of the intended software architecture.

Phases

You may propose your own phases, but the following phases are desired:

Phase 1: Proof of Concept—Implement the basic version of your proposed design and submit a final design for the client-side and server-side functionalities. This should include final versions of any cryptographic primitives and fully explained versions of all data structures and sub-protocols, as well as discussions on integration with a service.

Phase 2: Initial CLI & Bot/Server Side—Implementing the bot, and an initial basic version of the client to interact with it.

- **Feed Me Bot**—Implement the bot for the system, for a client to connect to and request a channel for a feed from. The bot should implement the full feed system, and have test coverage of at least 85% with a CI/CD automated testing script.
- **Initial client library**—An initial, command line based client should be made to interact with and develop the bot. It should be a library, with a command line interface wrapping the library. Doing it this way will make reusing it in the app easier. The command line client should implement the full feed system, and have test coverage of at least 85% with a CI/CD automated testing script.

Phase 3: Mobile Apps—Android and iOS app with the final user interface design using the library from Phase 2.

- **Android App**—Android app with the final user interface design using the library from Phase 2.
- **iOS app**—iOS app with the final user interface design using the library from Phase 2.

Submission Instructions

Proposers should submit their proposals, in English, to the following website:

- <https://xxfoundation.org/archive/xx-foundation-announces-the-xx-dapps-grant-program>

Note that proposals are divided into 2 parts: An anonymized technical proposal and a staffing proposal. The technical proposal will be posted online and should not contain any identifying information about your organization or staff. The staffing proposal will contain resumes and additional evidence for why you and your team are qualified to do the work you propose.