## Vision and Scope Document

for

# **Snippet Sharing**

Version 1.0 approved

Prepared by

Anastasiia Kolomoiets Mykhailo Kaskun Yaroslav Kormushyn Yurii Posivnych

Ivan Franko National University

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## **Revision History**

Name	Date	Reason For Changes	Version

## 1. Business Requirements

#### 1.1. Background

In a team or student group environment, we often share text or code pieces. And it should happen fast and without additional overhead for newcomers. There are a lot of similar tools that let you share text over the Internet. But these tools (or websites) manage the access control in some inconvenient way - like cookies or authorization. So we decided to provide a more practical, but still reliable solution.

This software will allow the creator of a snippet to share it within different scopes. The user can provide the receiver either full access - view/edit/delete, or read-only access, while still using the software anonymously.

#### 1.2. Business Opportunity

This software solution will be used within our group or any other team/group occasionally. The tool provides a fast and easy way to share a text/code snippet.

#### Commercial off-the-shelf solution:

There are plenty of similar products on the market. For example, tmptxt, which also gives you two links with different access modes and even allows you to set the expire timer. But it lacks the edit mode and customizability, both of which our solution includes. Another competitor Paste Of Code provides the edit mode, but you can share only in view mode. And probably the greatest competitor is Codeshare - this one allows real-time sharing which is nice for interviews, troubleshooting, teaching. But our product doesn't target this range of activities - it's just for simple copy-paste sharing.

## 1.3. Business Objectives and Success Criteria

- BO-1: Reduce the time to share text/code within our team.
- BO-2: Since it is the Open Source Project the revenue is not expected. But we expect the active users.
- BO-3: The project serves as a playground with Firebase platform to determine if it is suitable for future projects.
- SC-1: Run this software product using cloud solutions and make it accessible asap.
- SC-2: Make our team use this software solution and advertise it for other teams.

#### 1.4. Customer or Market Needs

MN-1: The system must be easy to use. Existing systems use a registration model to handle authorization. This software must provide a one-click sharing for new users without the sign up overhead.

MN-2: The system must be anonymous. Any snippet must not be traceable to a single user.

MN-3: The system must work in most browsing environments within acceptable response limits.

#### 1.5. Business Risks

BR-1: The product might become more popular, leading to an increase in the cost of maintaining the product and to a much lower ROI. (Probability = 0.2; Impact = 3)

BR-2: The project may fail to meet hard deadlines set in grant terms. (Probability = 0.1; Impact = 7)

BR-3: Market alternatives might hold their share by implementing a similar sharing system in the scope of their products (Probability = 0.1; Impact = 9)

## 2. Vision of the Solution

#### 2.1. Vision Statement

Snippet Sharing will be a simple and convenient service for sharing text or code between users. Unlike other services, this application highlight code in the manner that the user select. Also, it provides an opportunity to share snippet in two modes: read-only and edit. In the first mode, users can only read the snippet and select a display style for it. In the second, the user can do everything from the previous mode and besides he can edit it.

#### 2.2. Major Features

FE-1: Create / edit / delete / save snippet

FE-2: Share read-only snippet

FE-3: Share editable snippet

FE-4: Change snippet font size

FE-5: Change program language for snippet

FE-6: Change canvas theme

FE-7: Enable / disable live autocomplete

FE-8: Enable / disable quick auto-snippets

#### 2.3. Assumptions and Dependencies

AS-1: Limit of cloud functions calls is not reached

AS-2: The snippet is not so huge so no need for extra time to save it

AS-3: Users don't forget links, because it is the only way to get access to the snippet

AS-4: Limit of simultaneous connection is not reached

DE-1: Firebase cloud functions work properly

## 3. Scope and Limitations

### 3.1. Scope of Initial Release and Subsequent Releases

Feature	Release 1	Release 2
FE-1	Fully implemented	
FE-2	Fully implemented	
FE-3	Fully implemented	
FE-4	Fully implemented	
FE-5	Implemented if time permits (medium priority)	Fully implemented

FE-6	Implemented if time permits (medium priority)	Fully implemented
FE-7	Not implemented	Fully implemented
FE-8	Not implemented	Fully implemented

#### 3.2. Limitations and Exclusions

- LI-1: Interface will be available in English only.
- LI-2: There will be no sign up for the service, so if the link to a snippet is lost there is no way to recover it.
- LI-3: Quick auto-snippets will be included only for languages where snippets make sense, e.g. no snippets for plaintext, xml, css, etc.

## 4. Business Context

#### 4.1. Stakeholder Profiles

Stakeholder	Major Value	Attitudes	Major Interests	Constraints
open-source developers	increased revenue	highly receptive, but expect high usability	simplicity of use; high reliability;	none identified no budget - open source project

## 4.2. Project Priorities

Dimension	Driver (state objective)	Constraint (state limits)	Degree of Freedom (state allowable range)
Schedule	release 1.0 to be available by 10/12/18, release 1.1 by 12/4/19		deadline for release 1.1 may overrun
Features		All high priority features must be functional in release 1.0	
Quality			90-95% of user acceptance tests must pass for release 1.0, 95-98% for release 1.1
Staff	team size is 4 multipurpose students		
Cost			no budget

## **4.3. Operating Environment**

- Data is stored in cloud-hosted Firebase Realtime Database, basic view settings are stored with snippet. Storage limit is 1 GB.
- Simultaneous connections are limited by 100 users.
- Cloud functions Invocations limit is 125K/month.
- Data is always accessible.
- Confidentiality of data is high priority.
- No authorization needed.