# Software requirements specification for project “STM32-bootloader”

## Authors

Bortnikov P.

Tarasov A.

Vasilev P.

Patrushev B.

## Introduction

*[General description of the project and its functionality.]*

## Glossary

*[All the unobvious project- and domain-related terms with their definitions/descriptions comes here.]*

## Actors

*[All the actors come here. For each actor it should be definition for its role and the general description of its goals and responsibilities within the given system.]*

## Functional requirements

### Strategic Use-cases

*[Optional. White-level use-cases. This section is useful when there are too many blue-level use-cases and they should be grouped somehow.]*

#### Use-case <UC-S-1>

#### Use-case <UC-S-2>

### Use-cases for <actor1>

*[In case the white-level use-cases are defined, here could be one additional level that groups blue-level use-cases by white-level ones, in addition to grouping by actors.]*

#### Use-case <UC-1-1>

*[Full UC description]*

**Actors:** *[essential]*

**Goals:** *[essential, goals for each actor]*

**Precondition:** *[optional, conditions that must be met within the system for this UC to be performable]*

**Trigger condition:** *[optional, action(-s) that triggers this UC]*

**Extensions:** *[optional, other UCs related to this one, i.e. triggered by this one]*

**Mains success scenario:** *[essential]*

1) <Action1>

2) <Action2>

3) …

**Alternative scenario <scenario-name1>:** *[optional]*

*[Trigger condition for <scenario-name1>]*

1) <Action1>

2) <Action2>

3) …

**Alternative scenario <scenario-name2>:** *[optional]*

…

**<Additional section>:**

**Notes:** *[optional, any other useful information about the UC]*

#### Use-case <UC-1-2>

*[Reference-only description, applicable when there are multiple actors for the UC, and the full description provided in other actor’s section]*

**Actors:** *[essential]*

The detailed description is provided in <…>

### Use-cases for <actor2>

…

## System-wide functional requirements

*[Optional. System-wide functional requirements that weave with multiple use-cases. Examples: authorization, audit]*

## Non-functional requirements

*[All the subsections are optional.]*

### Environment

*[Environment requirements are limitations for hardware and software usage including supported hardware platforms, networking infrastructure and protocols, programming languages, libraries and external services]*

### Performance

*[The performance characteristics of the system should be outlined in this section. Examples are response time, throughput, capacity and startup or shutdown times.]*

### Reliability

*[Reliability includes the product and/or system's ability to keep running under stress and adverse conditions. Specify requirements for reliability acceptance levels, and how they will be measured and evaluated. Suggested topics are availability, frequency of severity of failures and recoverability.]*

### Extensibility

*[This section indicates requirements that will enhance the extensibility including extension points, compatibility, scalability, configurability]*