**1. Introduction**

A Telegram bot, which can download video and/or audio from Youtube.

* 1. **Purpose**

Often people want to download songs or videos on their local machine, so they would be able to have the access to the media without internet.

* 1. **Scope**

Bot will download files only from Youtube and no other site.

**1.3 Definitions, Acronyms and Abbreviations**

Not needed.

**1.4 References**

Not needed.

**1.5 Technologies to be used**

Three Python packages:

python-telegram-bot - a library that helps you to interact with the Telegram Bot API.  
pytube - a library to download videos from YouTube.  
ffmpeg - a library to convert files.

**1.6 Overview 2. Overall Description**

The concept is simple:

Bot will receive links to videos, user will be able to choose from 2 options:

A) Download a full video;  
B) Download only audio;

That’s it.

User interface:

3 buttons in the main menu:

1. “Скачать один трек”;

After this button is pressed, user will receive a message that says: “Provide a link to the video”.

User would be able either provide the link or click “back” option.  
If provided link would be correct, bot will send into the chat a file which user asked for.

1. “Скачать плейлист”;

After this button is pressed, user will receive a message that says: “Provide a link to the playlist”.

User would be able either provide the link or click “back” option.  
If provided link would be correct, bot will send into the chat files which user asked for.

1. “Закрыть”.

This button closes the menu.

2.1 UseCase Model Survey

Not needed.  
There are not many things that could go wrong:

1. User could provide a broken link or a link to another site.

In this case program would tell user to provide a correct link.

1. The video user wants to download is too big.

In this case user would be asked to wait till download is complete.

1. User may interrupt a download willingly or unwillingly.

All progress would be lost. Such a pity.

1. Youtube may be unavailable.

User would be notified to try again later.

2.2 Architecture diagram & database design

No database required.  
  
Four modules:

1. Main.
2. Download\_n\_convert.
3. Keyboard.

2.3 Assumptions and Dependencies

3. Specific Requirements

Program should work.

3.1 UseCase Reports

3.2 Supplementary Requirements

None.

4. Supporting Information

None

5. Concerns / Queries / Doubts if any:

None.