1. Introduction
1.1 Purpose

Design the service which procure news items from a spectrum of Russian-language sources, distill the core news content, assess it positivity[1] and securely store it.

1.2 Work scope

Work scope compiled based on the product description and consist of:
1. design database based on domain analysis and product requirements;
2. design server-side product part based on domain analysis and product requirements with the possibility of expanding the functionality at the development and support product lifetime stage;
3. design user-friendly[2] client-side product part based on product requirements.
4. compile product to deployment (installation) package for easy of deployment in a server environment.

1.3 Definitions

News positivity[1] - positivity is a metric that set based on the text of the news
User-friendly[2] -

1.4 Overview

The service should be designed to procure news items from a spectrum of Russian-language sources, distill the core news content, assess its "positivity," and securely store it within the confines of your service infrastructure. Moreover, users accessing your platform will have visibility into news items rated according to your configurable basic positivity[1]. Authorized users retain the privilege to customize these metrics to align with their preferences. The service is also equipped with an administrative interface, facilitating interaction with ongoing operations such as news editing, comment moderation, and related functions.

2. Overall description
2.1 Product perspective

Product perspective compiled based on the product requirements and consist of:
1. procure news items from a spectrum of Russian-language sources;
2. assess basic news positivity[1] for procured news items;
3. users accessing service view procured news items rated according to basic positivity[1];
4. authorized users have opportunity customize news positivity[1] metrics to align with their preferences;
5. authorized users have the opportunity to comment on the procured news items;
6. moderators have the opportunity to editing news content, comment moderation, and perform related functions.

2.2 Product functions

Product perspective compiled based on the product requirements and consist of:

1. preconfigure spectrum of used Russian-language sources;
2. configure by service administrators a spectrum of used Russian-language news sourses (optional);
3. automatic procure news items published by news sources during the day;
4. distill the core news content such as title, article, media files and content structure from procured news items;
5. assess by algorithm basic <u>news positivity</u>[1] for procured news;
6. service moderators have the opportunity change the basic <u>news positivity</u>[1] set by the algorithm (optional);
7. securely store procured news items with main content and metadata (e.g. title, article, media files, content structure, <u>news positivity</u>[1], (tags, category, user rating - optional) etc.);
8. users accessing service view procured news items rated according to basic <u>news positivity</u>[1];
9. authorized users have opportunity customize the selection of displayed procured news items by <u>news positivity</u>[1] metrics to align with their preferences;
10. comment on the procured news items by authorized users;
11. authorized users have opportunity customize users rating for procured news items (optional);
12. filtering of procured news items by category, tags, users rating (optional);
13. editing procured news items content such as title, article, media files, content structure by service moderators;
14. comment moderation by service moderators.

2.3 Constraints

2.4 Use cases

The ways to use the product are indicated in the use case diagram which is located in the diagrams.

3.1 Specific requirements