

TALLINN UNIVERSITY OF TECHNOLOGY
School of Information Technologies

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MangaHouse

Distributed systems project

Bachelor's thesis

Supervisor: Andres Käver

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TALLINNA TEHNIKAÜLIKOOL
Infotehnoloogia teaduskond

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Bakalaureusetöö

Juhendaja: Andres Käver

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Author's declaration of originality

I hereby certify that I am the sole author of this thesis. All the used materials, references to the literature and the work of others have been referred to. This thesis has not been presented for examination anywhere else.

Author: Kirill Grigorjev

15.02.2024

Abstract

The main approach for this project is to create a comfortable and user-friendly webapp for manga reading.

This thesis is written English and is [number of pages in main document] pages long, including [number] chapters, [number] figures and [number] tables.

Annotatsioon

MangaHouse

Töö põhi eesmärk luua mugava ja kasutaja sõbraliku webäppi.

Lõputöö on kirjutatud [mis keeles] keeles ning sisaldab teksti [lehekülgede arv] leheküljel, [peatükkide arv] peatükki, [jooniste arv] joonist, [tabelite arv] tabelit.

List of abbreviations and terms

DPI	Dots per inch
IA	Department of Computer Systems
PK	Primary Key
FK	Foreign Key
1-M	One-to-Many relationship
1-0	One-to-Zero relationship
1-1	One-to-One relationship
UX	User Experience
MVP	Minimal viable product
XP	Experience

Table of contents

Author’s declaration of originality	3
Abstract.....	4
Annotatsioon MangaHouse	5
List of abbreviations and terms	6
Table of contents	7
List of figures	8
List of tables	9
1 Introduction	10
2 Releases	12
2.1 Release V1.0 (MVP).....	12
2.1.1 ERD	12
2.1.2 Frontend.....	13
2.2 Release V1.1	19
3 Future Releases.....	20
3.1 Regular User Interactions with Manga.....	20
3.2 XP system.....	20
3.3 News and Forum system.....	20
References	21
Appendix 1 – Non-exclusive licence for reproduction and publication of a graduation thesis	22

List of figures

Figure 1. ERD for release V1.0.	12
Figure 2. Main page structure on PC.	13
Figure 3. Main page structure on mobile phone.	14
Figure 4. Last popular updates section structure.	15
Figure 5. Last updates section structure.	16
Figure 6. Reading page structure for PC.	17
Figure 7. Reading page structure for phone.	18
Figure 8. Possible push notification for new chapter.	19

List of tables

No table of figures entries found.

1 Introduction

The goal of this project is to create a comfortable and user-friendly for manga reading. User should get free and easy access to entertain themselves. The need for a proper reading webapp came from authors personal preferences and need for add-free or at least noisy add free will. Author has tried several webpages for reading manga, but they have not filled all the needs and wishes upon the service provided. This project is aiming to move towards manga readers UX.

2 Analyse

Author is used to read manga on different websites. As course started, he was interested in creating his own manga storing website, which could be later used as a product for future development and deployment.

Manga is theoretically something between regular book and some movie, mostly it is the same as comics. Comics have a lot of different categories (ex: superheroes, horror, fantasy, etc.) and manga should be searched by them as well. Manga have some types like manga (Japanese comics), manhwa (Korean comics), Manhua (Chinese comics).

Literary creation cannot be translated immediately, or release can be stopped, that's why there should be some status like abandoned, continues, paused or something like that.

Manga, like any different literature, contains chapters, which have own title, can be split into different toms (book editions). Illustrations are the main part of manga, so chapters have their own number of images in specific order.

3 Releases

3.1 Release V1.0 (MVP)

The scope of first release is to make some foundation for future releases and make minimal feature set for manga reading. As a result, user should get functionality for manipulating manga, chapters and images.

First version will have a restriction, that only owner or admin user can create manga, add chapters and manipulate with images. Future releases will have such functionality for approved users or groups of users.

Regular user should have free access to already existing mangas and their materials. System should store user's activity like already read chapters, saved mangas, etc.

3.1.1 ERD

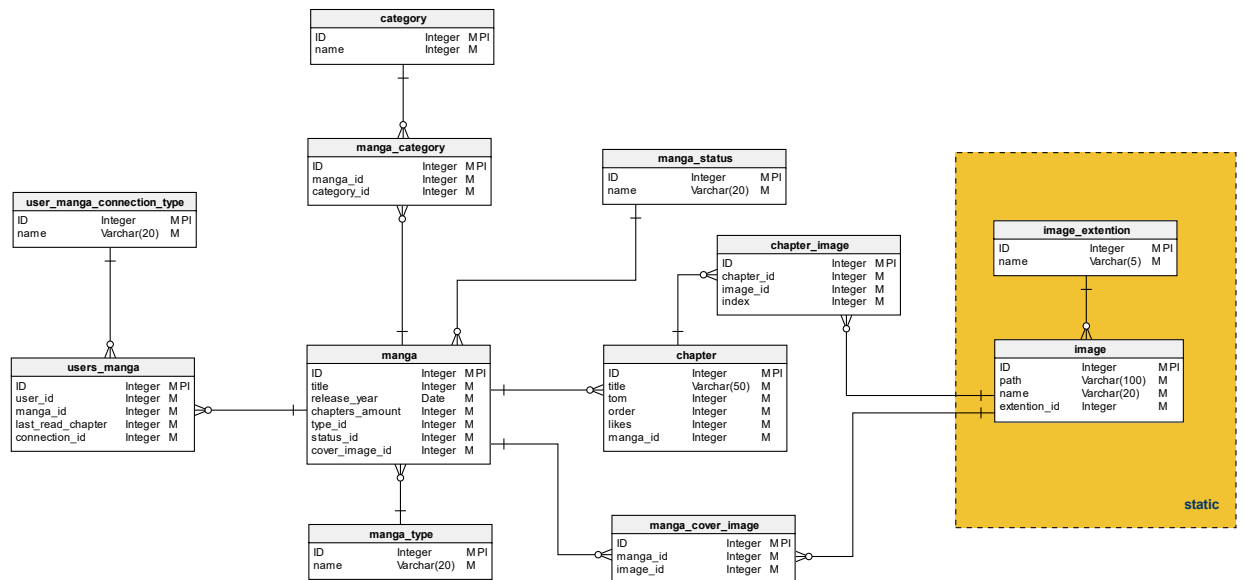


Figure 1. ERD for release V1.0.

3.1.2 Frontend

3.1.2.1 Main page

There are two main structures for the webpage: PC and mobile versions. Mobile version should be prioritized due to target audience. People read something while they are going somewhere and need some mobile way of entertainment.

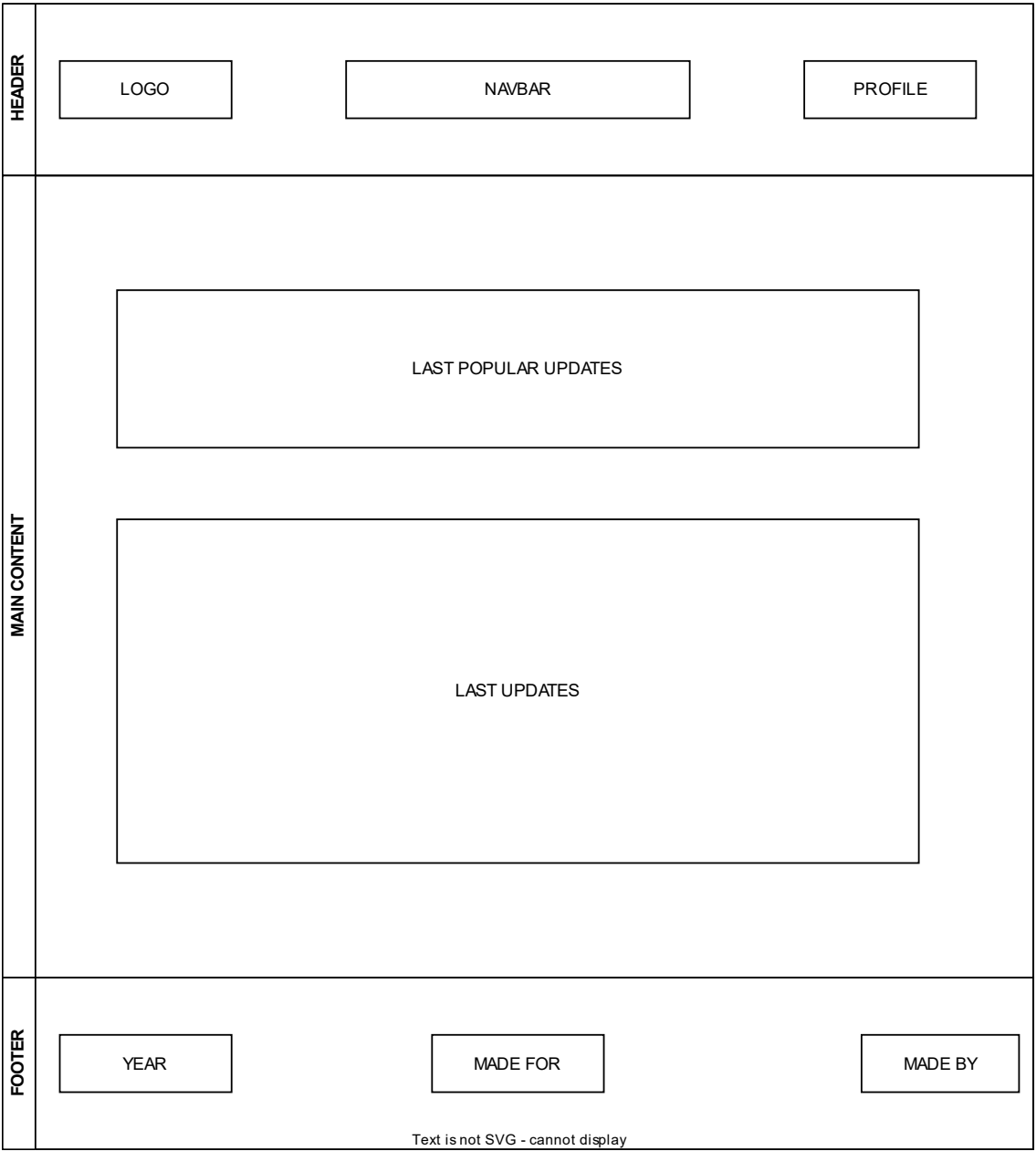


Figure 2. Main page structure on PC.

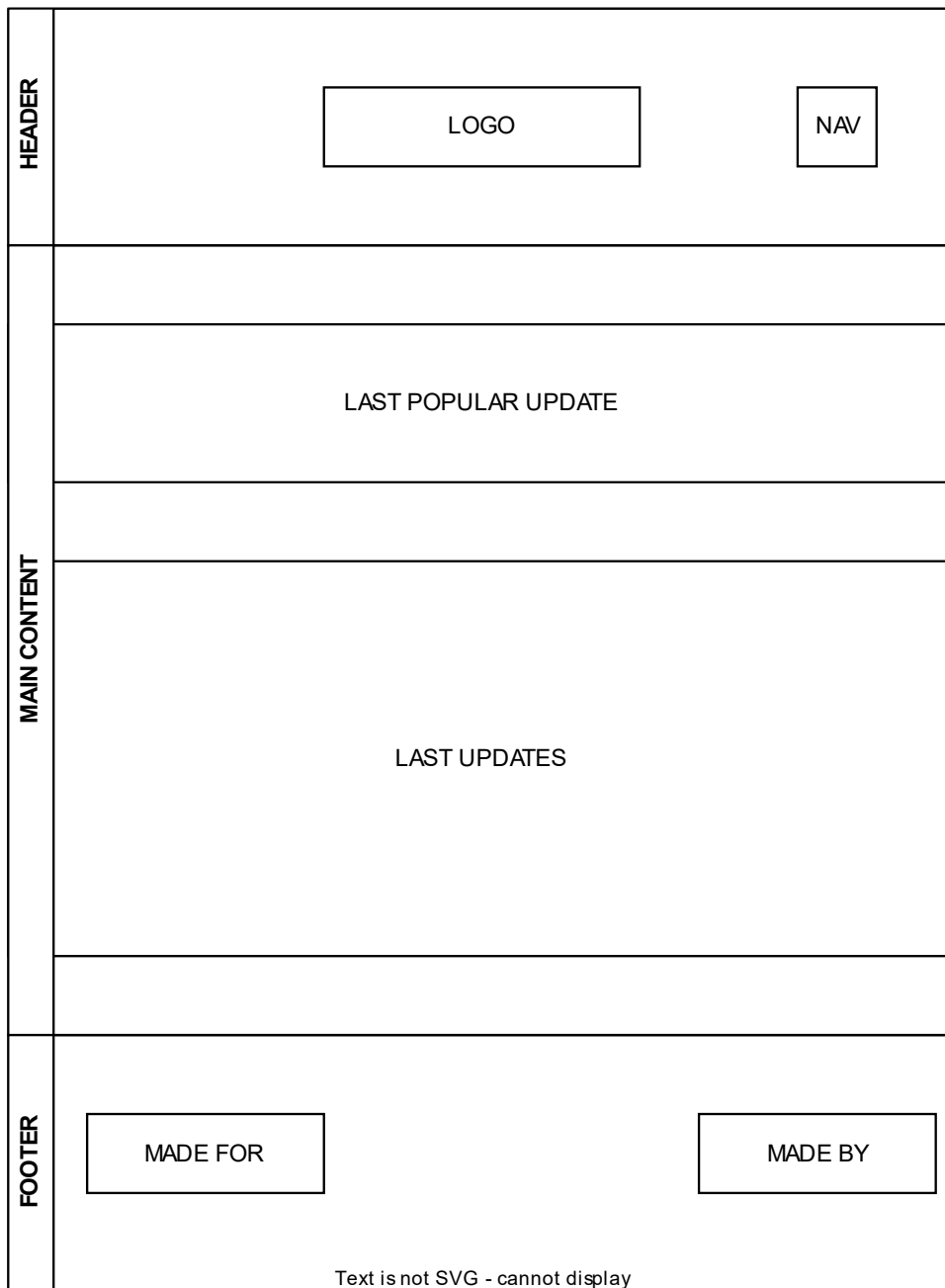


Figure 3. Main page structure on mobile phone.

The main difference for release V1.0 for them is hamburger menu at top right corner. Header takes a lot of space and concentration due to small screen, where main content and header proportion is small. Hamburger menu will help phone users to focus on main content not on a navbar.

3.1.2.1.1 LAST POPULAR UPDATES

As title says, this section will contain some information about last popular updates. This section will have the following structure:

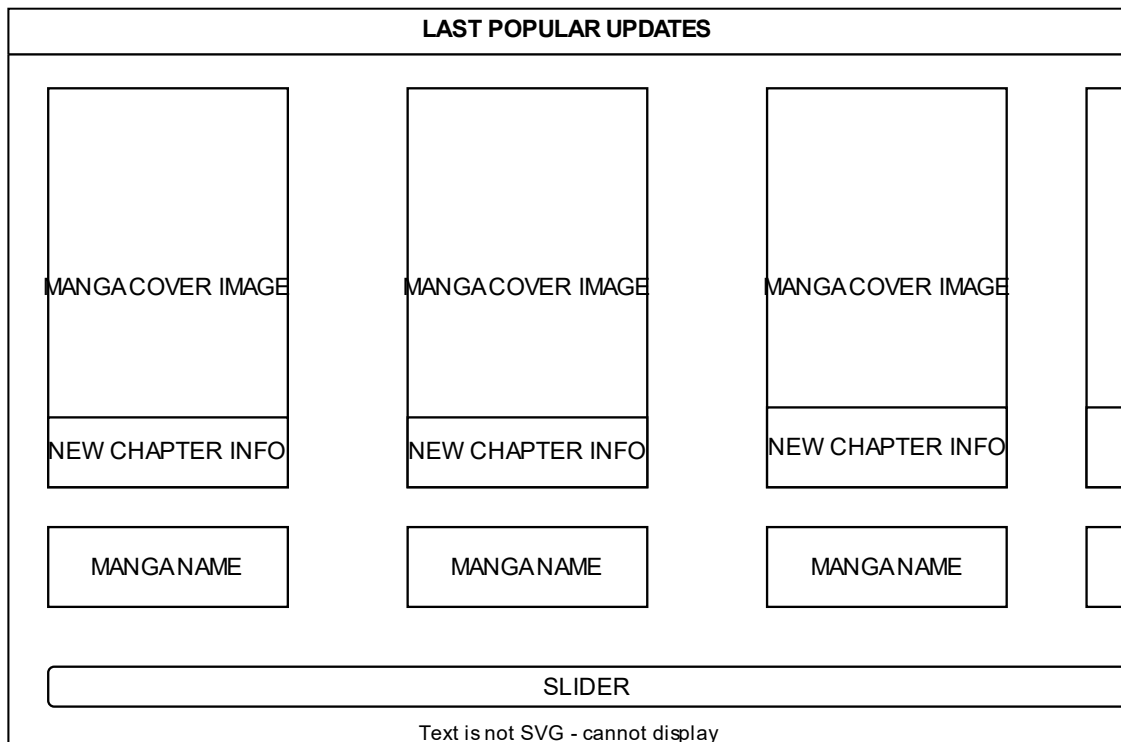


Figure 4. Last popular updates section structure.

This structure is width-free, which means that number of updates can be any size. Slider will help in navigation for PC users and will help visually navigate phone users.

3.1.2.1.2 LAST UPDATES

As title says, this section will contain some information about last popular updates. This section will have the following structure:

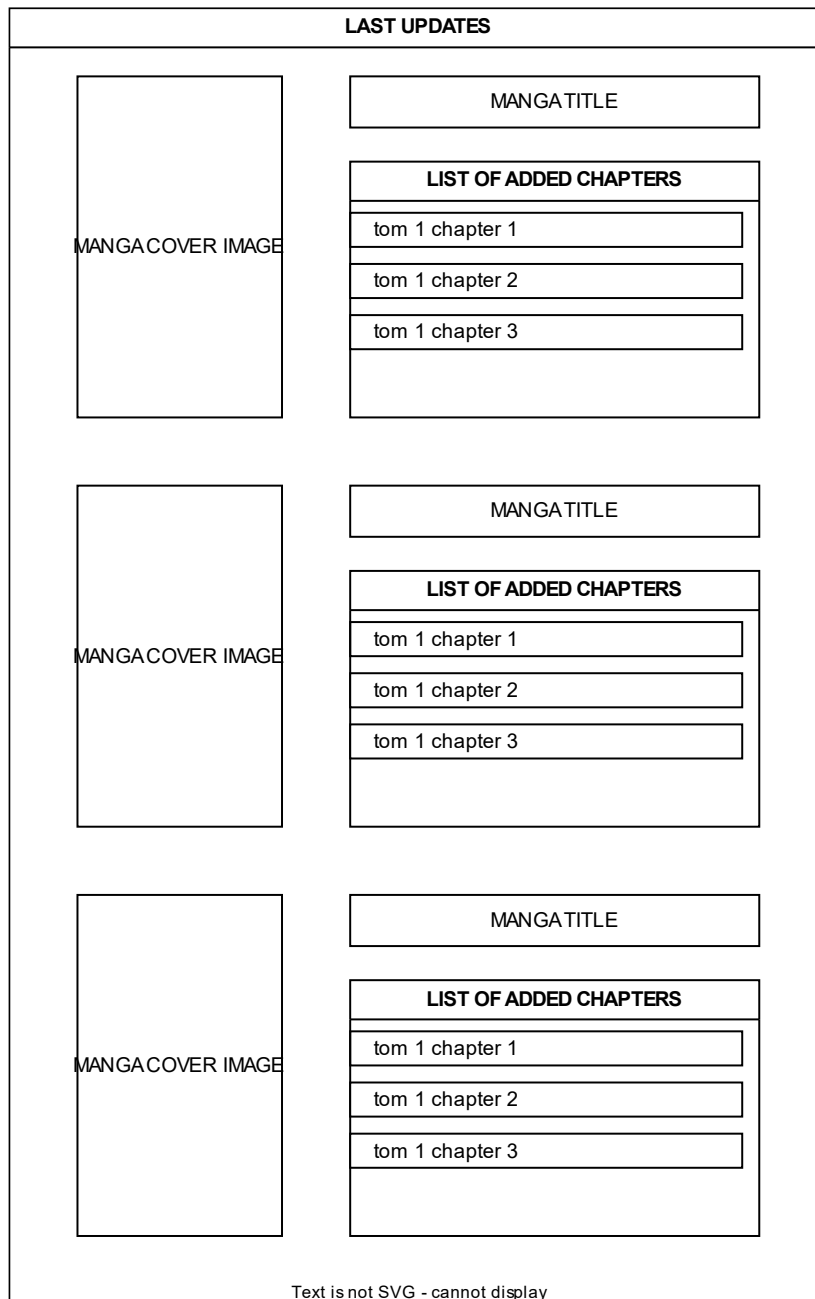


Figure 5. Last updates section structure.

This section will contain all new updates regardless of popularity.

3.1.2.2 Reading page

There are two main structures for the webpage: PC and mobile versions. Pages difference are header and images width. Images will take the whole space at mobile phone, but PC version will be limited.

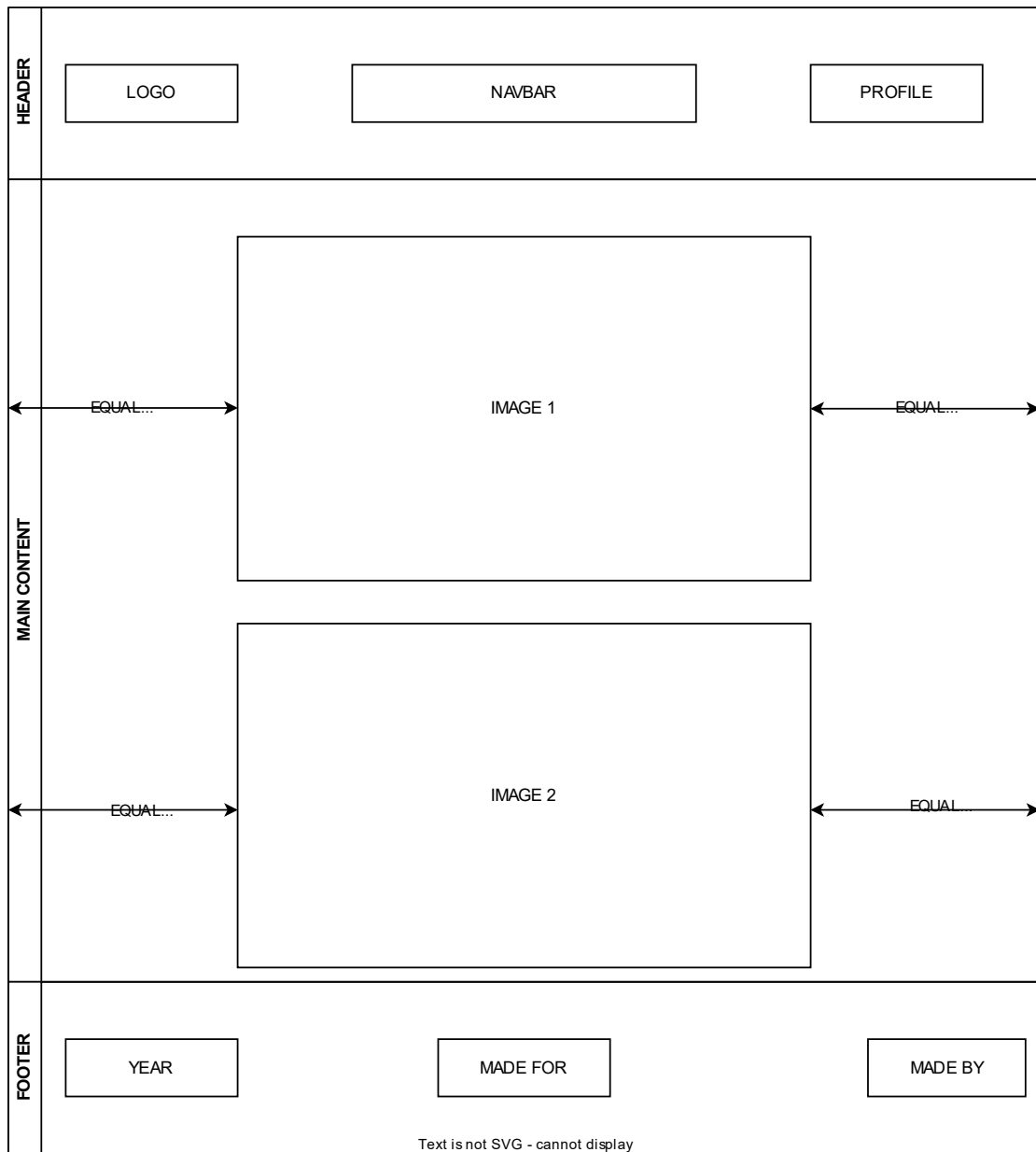


Figure 6. Reading page structure for PC.

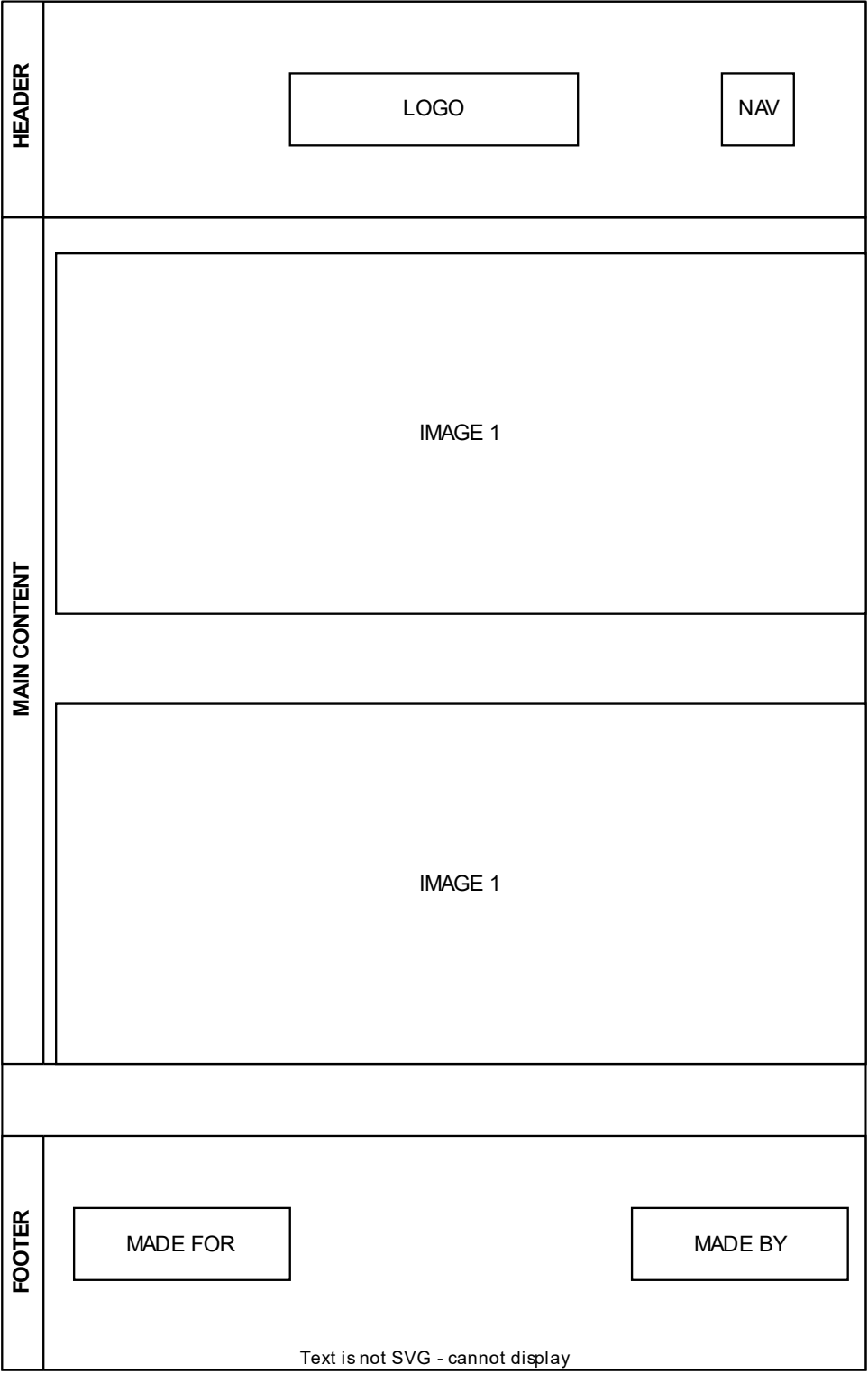


Figure 7. Reading page structure for phone.

3.2 Release V1.1

The main reason for this small update is to add notification system, which can notify readers about new chapters in their favorite mangas. Notifications should be done at least like push notification.

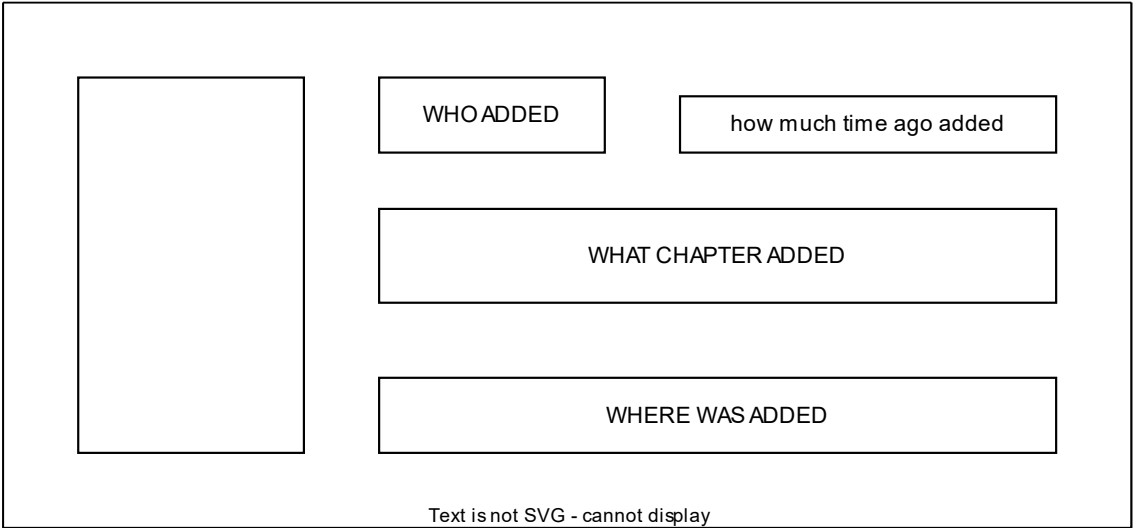


Figure 8. Possible push notification for new chapter.

4 Future Releases

4.1 Regular User Interactions with Manga

There should be some sort of functionality for regular user to leave a comment or approval for manga / chapter / other user's comment.

The author, at the same time the owner, thinks that this would be an amazing idea to add it for users between interactions. It is opportunity for a person, who uploaded something, to get feedback: should he continue to upload new chapters, improve something or even try something different.

4.2 XP system

The scope of this update would be to give users more entertainment opportunities. You can enjoy Your favorite activity and get some enjoyment to see yourself in tops.

Top ideas:

- Top 10 most active people.
- Top 100 readers, who read the most chapters.
- Top 10 users, who got most likes for their uploads.
- Etc.

This is only examples of possible actual ideas. Numbers and functionality may be different.

4.3 News and Forum system

There should be some kind of forum for users to interact between, to find some help and have fun in sweettalks. Also, forum is kind a need to spread news between them.

References

There are no sources in the current document.

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