

UKRAINIAN CATHOLIC UNIVERSITY

BACHELOR THESIS

Developing user interface design for a TV show tracking mobile application based on user experience

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*A thesis submitted in fulfillment of the requirements
for the degree of Bachelor of Science*

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Declaration of Authorship

I, Olha KORABLOVA, declare that this thesis titled, “Developing user interface design for a TV show tracking mobile application based on user experience” and the work presented in it are my own. I confirm that:

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- Where any part of this thesis has previously been submitted for a degree or any other qualification at this University or any other institution, this has been clearly stated.
- Where I have consulted the published work of others, this is always clearly attributed.
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UKRAINIAN CATHOLIC UNIVERSITY

Faculty of Applied Sciences

Bachelor of Science

**Developing user interface design for a TV show tracking mobile application
based on user experience**

by Olha KORABLOVA

Abstract

The purpose of this bachelor's thesis is to analyze the experience of users of leading TV shows tracking apps and to build own user interface for the mobile program based on the best practices and data collected during in-depth research and analysis of the market and the needs of potential users.

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I want to thank my supervisor Viktoriya Faion for directing and mentoring me during the research and development process, for reviewing the jobs I have done, and all the consultations provided. . . .

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List of Abbreviations

UI	User Interface
UX	User Experience
SWOT	Strength Weakness Opportunity Threat
UCD	User-Centered Design
BMC	Business Model Canvas
VPC	Value Proposition Canvas
UML	Unified Modeling Language
IA	Information Architecture
OS	Operating System

*To my loving family that supported me during my long trip at
the university*

Chapter 1

Introduction

1.1 Problem

Modern people have a lot of affairs, ideas, everyday events, that can sometimes be hard to keep track of. When it comes to watching the series, for many it turns into a problem, since remembering where you stopped, for example, a week ago, or when the next episode of the TV show is coming out, sometimes become a quite tricky task.

1.2 Motivation

Nowadays, more and more people are getting acquainted with the vast world of television shows, and in the very first steps as a serial spectator, most people face the problem of "how to remember everything and at once." Specifically, I have been watching the series since 2014, and I can confidently say that when you follow three or four shows, it is hard to remember where and at what moment you stopped, not to mention watching even more shows.

The motivation for me to design my tracker was the desire to make life easier for myself and for people who, like me, love watching TV shows. The solution I made up with is a prototype of the program that will always keep us pace with the times, so we do not ask ourselves "did I see this episode?", and will let us be the ones of the first who view the new episodes.

1.3 Goals

1. Make TV shows tracking easier and more comfortable.
2. Create a tracker to mark watched episodes or put time marks if a user hasn't finished watching the episode yet.
3. Let users be up-to-date with their favorite series.
4. Send recommendations, so the user will always know what to watch.
5. Have a calendar with upcoming releases.

Chapter 2

Related works and Background Information

2.1 Stakeholders mapping

A stakeholder is an individual, group or organization, who has an interest or influence on the project (Mitroff, 1983; Freeman, 1984; Harrison and Caron, 1993). There are two types - internal and external. Internal stakeholders are people who are connected with the project directly. Other words, they are company employees, investors or owners. Hence, external stakeholders are people who do not have a direct relationship with a company, but they somehow are affected by the project's outcome and result.

Stakeholder mapping is a popular approach for determining how stakeholders interact with organizations and what impact they may have. Evaluating the importance of a stakeholder expectation is a key part of any project strategy analysis. To assess these expectations, the most convenient method is to build a *Power/Interest matrix* (Figure 2.1) (Johnson and Scholes, 1999).

		LEVEL OF INTEREST	
		Low	High
POWER	Low	A Minimal effort	B Keep informed
	High	C Keep satisfied	D Key players

FIGURE 2.1: Power/Interest Matrix.

Power/Interest matrix classifies stakeholders to four groups, depending on their interests and power (influence) in the project:

- Stakeholders with little interest and little power (*part A*) need minor effort on the part of the project manager. We should keep regular but minimal contact with them.
- Stakeholders with a high level of interest but little power (*part B*) must be kept completely informed of the major steps and changes we have been made or plan to do. Proper communication with this type of stakeholder is essential.
- Stakeholders with a low level of interest in the project but a high influence (*part C*) require a very attentive attitude. We have to anticipate and meet their needs. However, this type is the most difficult to manage. Their level of interest will remain the same unless they feel satisfied. Otherwise, due to their powerful position, the level of interest can easily increase and they automatically move to section D.
- *Section D* contains key players - stakeholders with high interest and high power. Clearly, the acceptability of decisions to these people is a major factor when determining project strategy.

After listing all the stakeholders, designing the project strategy will be a way easier.

2.2 Competitor analysis

Competitor analysis - is a technique used for comparing your project with similar products that already exist in the market. This approach requires building a competition table, where columns stand for your opponents' products/decisions, and rows contain features and characteristics of the project (Gordon, 1989). It helps to evaluate the strong and weak sides of each competitor and see what opportunities and threats may appear for your own project.

2.3 SWOT

SWOT is a strategic planning tool used for evaluating Strengths, Weaknesses, Opportunities, and Threats for the project and making out the right strategies in the product development process (Humphrey, 2005). There are basic questions that should be answered before determining each of these four sides:

- How can we **U**se each Strength?
- How can we **S**top each Weakness?
- How can we **E**xploit each Opportunity?
- How can we **D**efend against each Threat?

It is pretty similar to the brainstorming, but when doing the SWOT analysis, it is important to use this tool correctly. This assignment should provide information that will help in further decision making.

	Helpful to achieving the objective	Harmful to achieving the objective
Internal (attributes of the organisation)	Strengths	Weaknesses
External (attributes of the environment)	Opportunities	Threats

FIGURE 2.2: SWOT Matrix.

Choosing strong and weak properties, it is most beneficial in comparison with opponents, and that is why these two parts belong to internal. Organizational Strengths are the characteristics that give an advantage over others in the industry; Weaknesses are, conversely, the components that place at a disadvantage relative to others.

By conducting an external analysis, an organization defines severe threats and opportunities in its competitive environment. Opportunities are external elements that give benefits to the organization, while threats cause harm.

SWOT can also be helpful when you do the initial market research and need to analyze the competitiveness of your opponents.

2.4 A User-Centered Design Method

It is a framework that pays extensive attention to users goals, needs, and feelings (Norman and Draper, 1986). UCD modal requires to take the user behavior in real-world tests into consideration to validate the assumptions on each stage of the design process. The goal is to make a product with high usability and usefulness (Vredenburg et al., 2002). It evaluates how much the product satisfies the user requirements, effectiveness level and, no less important, manageability.

The UCD process includes some phases, designers need to always remember:

1. Determine the usage context (What is your potential audience? What problems do you cover for them? And why should they use your product and when?)
2. Specify the requirements
3. Design and development
4. Test the prototype in real-world cases

Furthermore, the UCD may have two different options in involving users to the development task. The first case is when users affect the design strategy at a specific moment. The second one requires involving users as partners - throughout the whole project designing.

It involves lots of different analyzing tools and the most popular are Personas, Use Cases and User Scenarios. They help a company to follow the realistic and articulated project goals, estimate the necessary resources accurately and predict desirable results.

2.5 Value proposition canvas

It is a part of the Business model canvas that is based on two elements of BMC - Value Proposition and Customer Segments (Figure 2.3). The first one is about how you are going to attract your customers and what value your project will bring, while the second is about users who you intend to create value for (Osterwalder et al., 2014).

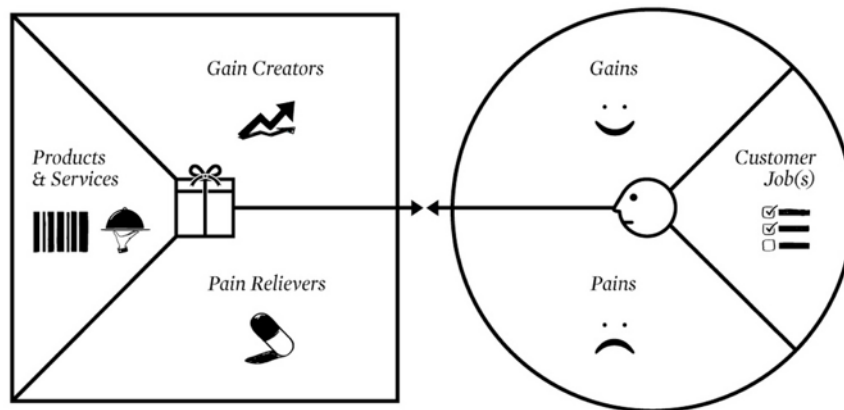


FIGURE 2.3: Value Proposition Canvas.

The VPC is used for mapping out both these sections in more details to show the fit between what an organization offers and what customers want.

The Customer Segment profile describes the characteristics of your clients in more details. The profile consists of the jobs the customers are trying to get done in their lives (issues, tasks, needs, etc.), the related pains that describe their fears and things they feel negative about or try to avoid, and the gains that are the positive outcomes and benefits the customers would like to receive.

The Value Proposition element should perfectly address your clients jobs, pains, and gains. The map is composed of the products and services, pain relievers and gain creators. *Products and services* are the actual values you can offer to make a customer functional, emotional or social job done (Osterwalder, Clark, and Pigneur, 2012); *Pain relievers* are outlining how these products can reduce the user bad feelings and pains, while *Gain creators* describes what positive outcomes your products and services can create for your customers.

When the features of the value proposition fully match the profile characteristics, it calls a *problem-solution fit*. If the market validates the match and the value proposition gives the expected result with real customers (vice versa), then the company achieved a *problem-market fit*.

2.6 Personas

User Persona is an archetype of a hypothetical user profile that represents a specific behavioral model. It outlines the user main characteristics, interests, goals, and needs (Cooper, 1999; Cooper and Reimann, 2003). Personas do not describe a real customer or an average one, they are not just fantasy or super unrealistic user profile. To make a persona, a designer needs to do some discovery of potential users,

and after he or she can create a more concrete and effective user profile with fictional details (Cooper, 1999).

Persona portrait includes 3 main steps:

1. User description (demographic and psychographic data). Other words, this section is about age, gender, country, jobs, hobbies, motivations and frustrations.
2. Environment description - the usage context (where and how the user interacts).
3. Task description (what work the user does, how often, etc.)

Generally, the design process should have up to 12 different personas, where each must have three or four important aims. Those intentions can be classified into three options - life, purpose, and experience goals. Life goals describe the target of individual existence. Purpose goals show what the user would like to use in a good-designed product. Experience goals define how the customer wants to feel when using the service or product (Cooper and Reimann, 2003).

The use of personas is a growingly popular way to customize, unite and share the research about users. It is a representative high impact system to map and design real users for the whole development team.

2.7 Use cases and UML diagrams

In software development, a use case is a set of actions that an actor (user or external system) dispatches when wants to reach a specific aim (Jacobson, 1992).

The use case approach expects to start with discovering behaviourally related lists of events that a system can execute to return a result of assessable value to actors who use the system. This technique helps to predict what classes and methods need to be implemented in the future system.

A use case itself may involve a lot of details about every possibility that makes reading and perception pretty difficult sometimes. As a result, a use-case diagram becomes a great solution for this small but critical issue. It demonstrates a higher-level view of the system, providing the simplified and graphical representation of what the system must do.

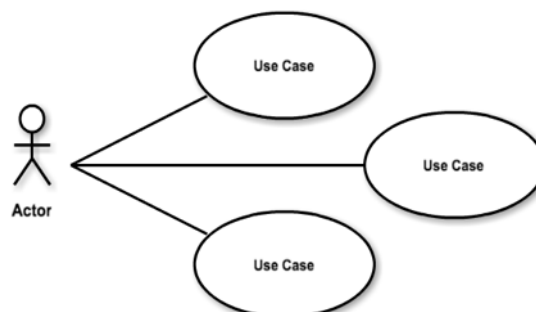


FIGURE 2.4: Simple UML Diagram Example.

Nowadays, developers use UML for creating use-case charts (Figure 2.4). The UML stands for Unified Modeling Language, that was adopted as a standard by the

Object Management Group (OMG) in 1997. The idea of UML was initially motivated by the desire to standardize the disparate notational systems and approaches to software design (Booch, Jacobson, and Rumbaugh, 2005).

2.8 Customer Journey Map

Customer Journey Map is a visual interpretation of a customer's relationship with an organization or its product. Basically, it illustrates the steps your client goes through in engaging with your company or product and the path they walk should not finish. The company has to think like their customers and understand what will make them come back again and again (OxfordSM, 1998).

Any successful journey map consists of 5 essential components:

- Touchpoints - a way how the consumer interacts with a business, how the persona will be aware of your product.
- Actions - activities that the user may want to do after each touchpoint
- Thoughts and Feelings - what personas think on each program page, what they feel, what questions may appear.
- Expectations - what the user can expect after each touchpoint, the path the user walks should be pretty obvious and easy.
- Opportunities - what sudden actions can make users feel happier.

2.9 Information Architecture

Information Architecture (IA) is a way of organizing and structuring the content of the service to make the user experience comfortable and more understandable (Wurman and Bradford, 1996). This approach intends on formation content in such a way so that consumers would simply adapt to the functionality of the product and could find all they need without significant effort in a small number of steps.

IA forms a skeleton of each project. Any great interface with appealing visual elements will never be powerful without appropriate architecture behind. It is like having an expensive and fashionable car that cannot ride, you do not have all the benefits then.

There are 4 main systems of information architecture (Rosenfeld and Morville, 2007):

1. Organization - how the content is organized, what intuitive way to make so that a user could reach the final point easily.
2. Labeling - the ways of data representation in a few words, giving labels to each important section.
3. Navigation - how users should move through the content.
4. Search - the short channel how to access necessary information.

To sum up, information architecture is a core element of the powerful UX design without which any project will not succeed.

2.10 Prototyping

A prototype is a representation of a project design before it will go to the tender programmers' hands. It is an important technique to reduce the cost and risk involved in developing complex software systems (Rudd and Isensee, 1994). It requires building smaller versions of a complex system in order to gain essential knowledge directly before beginning the project development process. In the case of false assumptions made on the stage of designing, it will be easier to make changes to the system architecture.

Chapter 3

Proposed Approach

3.1 Discovery

Every project starts with designing the system architecture that will be able to solve a specific problem or the whole set of them. First of all, the design team does the research of the market, checks existing solutions, competitors and at the end of the discovery conducts a survey based on results from previous steps.

My first step was mapping the potential stakeholders into the Power/Interest matrix to determine what groups of people have significant or minor impact on the product.

The second step was the initial market research. I searched for existing solutions of the problem and, as a result, I chose several of the most popular apps from the app store to investigate how each of them works and what functionality provides to solve the issue of tracking and following TV shows.

The following task requires comparing the potential opponents on the market with each other. It is necessary for creating a broader picture of what customers are used to using and what experience they may get after their first usage. After listing all the competitive features, a good step is to do a SWOT analysis – choose strong and weak sides of each competitor and determine probable opportunities and threats for them.

Not less effective point of the discovery flow is to create Value and Proposition Canvas. It helps to generalize the problem we try to solve and fulfill all users' needs, relieve their pains and create gains.

3.2 Idea and Strategy

This part of the design process requires imagination, designer creativity, and analysis of the survey results. Based on all previous steps, now it is time to create personas. Each persona is a fictional character, the so-called ideal potential user. It includes the user personality, habits and short bio that describes the user's behavior and how his typical day looks like so that the designer can see the full customer portrait.

The next task is to find out the probable customer journey and experience. The designer must imagine himself at the user's place and determine which path the user usually passes to achieve his goal. The Customer Journey Map includes the actions the customer takes, questions that may appear during his first experience, feelings, and thoughts caused by a specific journey part.

Before moving to the app architecture planning, firstly we need to choose a few primary actions for the app to do and visualize it in the user flows.

The following not less important assignment the designer starts with creating the information architecture. It is necessary for further modeling and prototyping the app. The IA shows what structure of the app is and what the user will see if he taps/slides this or that button/text/image/section etc.

3.3 Design Implementation

Taking as a basis all the previous steps, we can finally take up the sketching. The IA will help us not to miss any important logic. Usually, during the design process, some good ideas can come to your mind so we can include expanding the IA as the part of design implementation here as well.

After having the simple sketches, we can continue with more detailed implementation – wireframing. At the stage of drawing wires, the best following activity will be adding actions between the screens. It allows the designer to test the prototype at the very beginning and prove or refute the assumptions. Based on the testing results, we can make some changes and improvements to the app architecture or redesign it at a very early stage and save a lot of time for the programmers that will be embodying the project to life.

Moreover, it is the right time to add styles and colors to move to the stage of mockups. Mockups give us insight on what the product will look like, and it can be already used for usability testing. Choosing a color palette is a pretty essential thing, as it directly influences the user's mood and feelings about the app, and assists users to interact with certain elements and understand important actions within the app.

For example, red is considered an intense, or even angry, the color that creates feelings of excitement or intensity. It can make the user feel annoyed, so using lots of red without any other colors is not the best idea. The yellow color usually attracts more attention; it associates with energy, but it can create feelings of frustration and anger, too. There is the whole color psychology that describes all the effects on people, and the good designer cannot omit it.

Not less important is the transitions between screens and elements. Each time the designer works on the prototype, he has to remember that too many and massive shifts may impact the user's mood severely, as well as the complete absence of those interactions. Using best practices can help to avoid overloading or having a boring interface.

3.4 Validation

This part of the thesis is about testing, confirmation, and refutation. After completing the prototype (clickable mockups), the designer brings it out to test it his assumptions the real environment with actual users. It is a so-called crowd testing. It can help us find out if the prototype matches our audience's expectations. Usually, the proper validation should include more than 5-8 respondents that fit our target audience, but the more people you ask, the more accurate the results will be.

The end users reveal whether the design is going to be successful or not. Based on the gathered data, recommendations can be integrated into the development process of the digital product. In the end, we will have a significant advantage over our competitors.

Chapter 4

Results

4.1 Summary of discovery

On average, a user has more than 80 apps installed on his smartphone and uses nine mobile apps daily and 30 apps in a month. It means that mobile applications now serve as necessary daily drivers for every human (Nick, 2019).

After conducting a survey, I received more than 140 responds, and now I can see that the target audience of the project is mostly the people of age 18-25 years old, both men and women. Moreover, the respondents use both Android and iOS proportionally. Given the rapid growth of Apple products on the market, especially in Ukraine, I choose to make a prototype for this operating system.

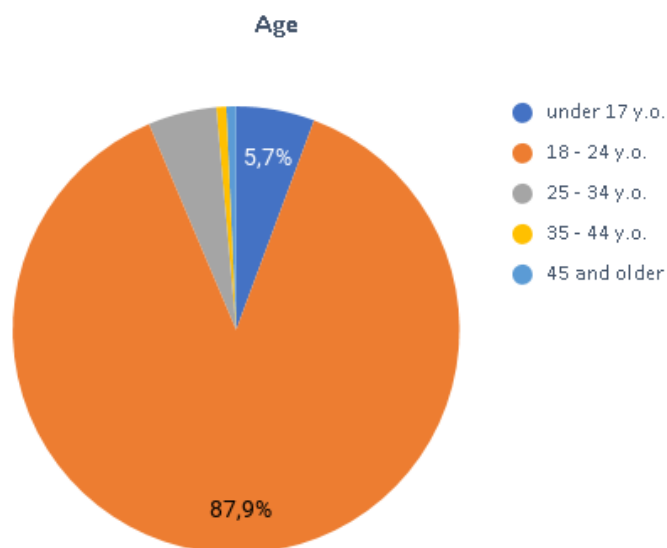


FIGURE 4.1: Survey results - Age.

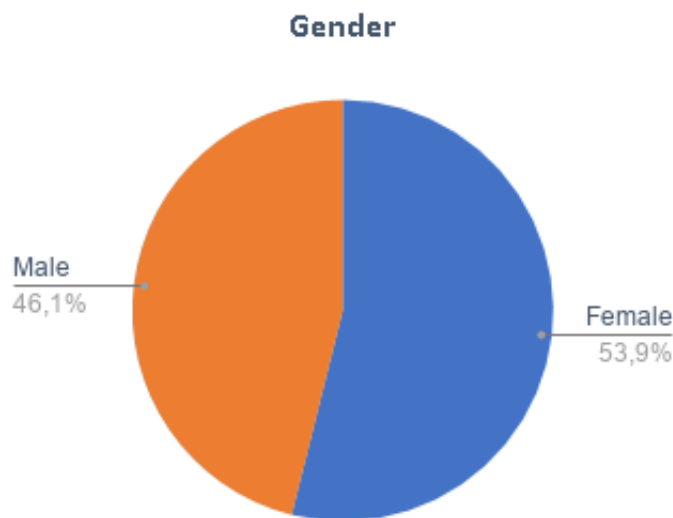


FIGURE 4.2: Survey results - Gender.

The obtained results show that people would like to have a tool for comfortable tracking. The goals formed on the answers are next - users would like to:

- receive notifications about new episodes released (80.1%)
- get recommendations with new TV shows (79.4%)
- have a calendar with releases dates (83.7%)
- check the playlist of a specific episode (91.5%)
- take part in an episode discussion (73.8%)
- search by different parameters (genre, actor, year, etc.) (63.8%)

After the online survey, I did a few oral questionings of potential users to get more detailed answers. Like the previous one, it gave me a picture of what the project should look like. According to the questionings, users would like to receive notifications, but only with really important information (about releases, basically). Some of the respondents also want to see recommendations, while some do not, arguing that it is easier to have a ready list of episodes that have already been released and not watched yet, rather than receiving tedious notifications.

4.1.1 Stakeholders mapping

Let's consider all the groups of people that may somehow have an impact on the app (Table 4.1).

First of all, there should be users of the app, and they are considered to be the most potent and interested group in the product. They are our primary audience, and without them, the project can stop existing because of low demand.

Besides, I would separate people who only watch TV shows from the potential users, as they may be not interested in the app and have no influence. They belong to the section with low interest and power. This section can also include the production

companies that shoot series. They are less interested in the app than TV viewers and, in essence, have no direct influence.

Returning to the section with a high level of power and interest, we can include there two more groups - developers and investors. Any project has to be maintained by the developers and be supported financially. Each system that wants to continue its life needs to have updates, otherwise the users may get bored, or some system bugs can cause unexpected behavior or even crashes. That is why these stakeholders are so crucial for us and belong to the most powerful and interested.

Now let's examine two sections that left. In terms of my bachelor project, the faculty of Applied Sciences at my university, as well as the examination commission, can affect the project. They are not very interested in the app, but they have the power to influence the further life and development of the product. The requirements that this group can provide me with are essential in the design process. So I would refer this group to the category with high power but low interest.

And the last one is a category with high interest and low power. I would include there the companies that make voice overs (interpreters) for TV shows and advertising companies as well. They, in turn, are interested in inviting a larger audience to their site. Thus these stakeholders have a benefit from the app users.

	Low Interest	High Interest
Low Power	TV shows' viewers TV production companies	Interpreters (LostFilm, ColdFilm etc.) Ad companies (JoyCasino etc.)
High Power	Faculty of Applied Sciences at UCU	Users of the tracker Developers/Investors

TABLE 4.1: Power/Interest Matrix.

4.1.2 Market research

Discovering the market gave me an approximate picture of what people use. For more in-depth analysis, I chose four of the most popular apps and explored their functionality. For better understanding, I listed all the features in the comparison table and calculated the competitiveness coefficient of each opponent. The formula of the coefficient is straightforward $k = n/m$, where n is the number of available properties, and m is the number of all features.

In my case, I listed 44 different features, so the denominator is constantly equal to 44, and the numerator changes for each item. All calculated values are listed in Table 4.2, where the first row is the numbers of the present features out of 44 and the second row is the obtained ratio.

TV Time	Seen It	iShows TV	YouTube
38	26	24	26
0.86	0.59	0.55	0.59

TABLE 4.2: Competitor analysis results.

Accordingly, the highest ratio is inherent in the strongest competitor and vice versa. Of course, taking into account only present functionality is not the best way

to evaluate the app competitiveness, but it is enough to be able to continue further analysis. Short review of each competitor:

- **TV Time** - a global community of TV fans tracking the shows, reacting with others, and sharing the moments that move us. Supported by iOS, Android and has web version;
- **Seen It** - an app, integrated with Trakt.tv for easier discovery, tracking, notifying and sharing. Supported only by iOS;
- **iShows** - keeps track of all user's watched TV Shows, with a gesture-driven UI. Supported by iOS and web version;
- **YouTube** - the world-famous resource that contains billions of videos and now has different extensions, like YouTube Premium, YouTube Originals that allow users to watch television shows and keep track of it. Supported by iOS, Android and has web version;

4.1.3 SWOT competitor analysis

Taking into account preliminary results, I can continue the analysis in a little bit different way. Determining the SWOT characteristics for each of the chosen competitors will help to generalize common strong and weak sides of the similar apps, and decide which ones to use in terms of "the best practice" and what should be avoided.

For example, an excellent property, that TV Time (Figure 4.3) and Seen It (Figure 4.4) applications have, is the spoiler prevention. As a serials lover, I am sure that no one loves spoilers and everyone would like to skip them all in every possible way. Besides, sending the notifications and recommendations to the user is a usual and, basically, an essential thing in tracker apps, since the user wants to be notified automatically rather than keep track of the episodes by himself.

Also, as we can see in the figures below, all the competitors have an episode or video discussions. It means that people are already accustomed to reading comments down below the watched content and want to know how others react, and moreover, they tend to participate in the discussion itself.

Summing up, the actions listed above can be taken as "strong features" and provided to the customers in my mobile application as well.



FIGURE 4.3: SWOT: TV Time.



FIGURE 4.4: SWOT: Seen It.



FIGURE 4.5: SWOT: iShows TV.



FIGURE 4.6: SWOT: YouTube.

4.1.4 Value Proposition Canvas

After the SWOT analysis is ready, I can go to defining the value propositions and customer segment of my business canvas. It allows me to build the VPC (Figure 4.7) and set the relationship between those two sections, described above. Based on the SWOT, I can already add some main functions that I would like to see as my value propositions and expand them with actions that will cover the opponents' weaknesses.

The next step is to go a little bit deeper and find out something totally new. For instance, providing the user with the playlist of a specific episode - something new, unique that nobody else has.

In this technique, the segments are divided into three sections, so that building the relationships is actually between each of these areas accordingly. I have formed the value proposition statement that briefly conveys the essence of this assignment:

"Our tracking app helps TV shows' viewers, who want to track their favorite television shows and be up-to-date with everything that happens about the serials, by marking watched episodes as done and do it in a very convenient and fast way, as well as keeping the releases dates in the app calendar and notifying the user about every updates. Moreover, the user will be able to find any additional information about the show or episode in the app."

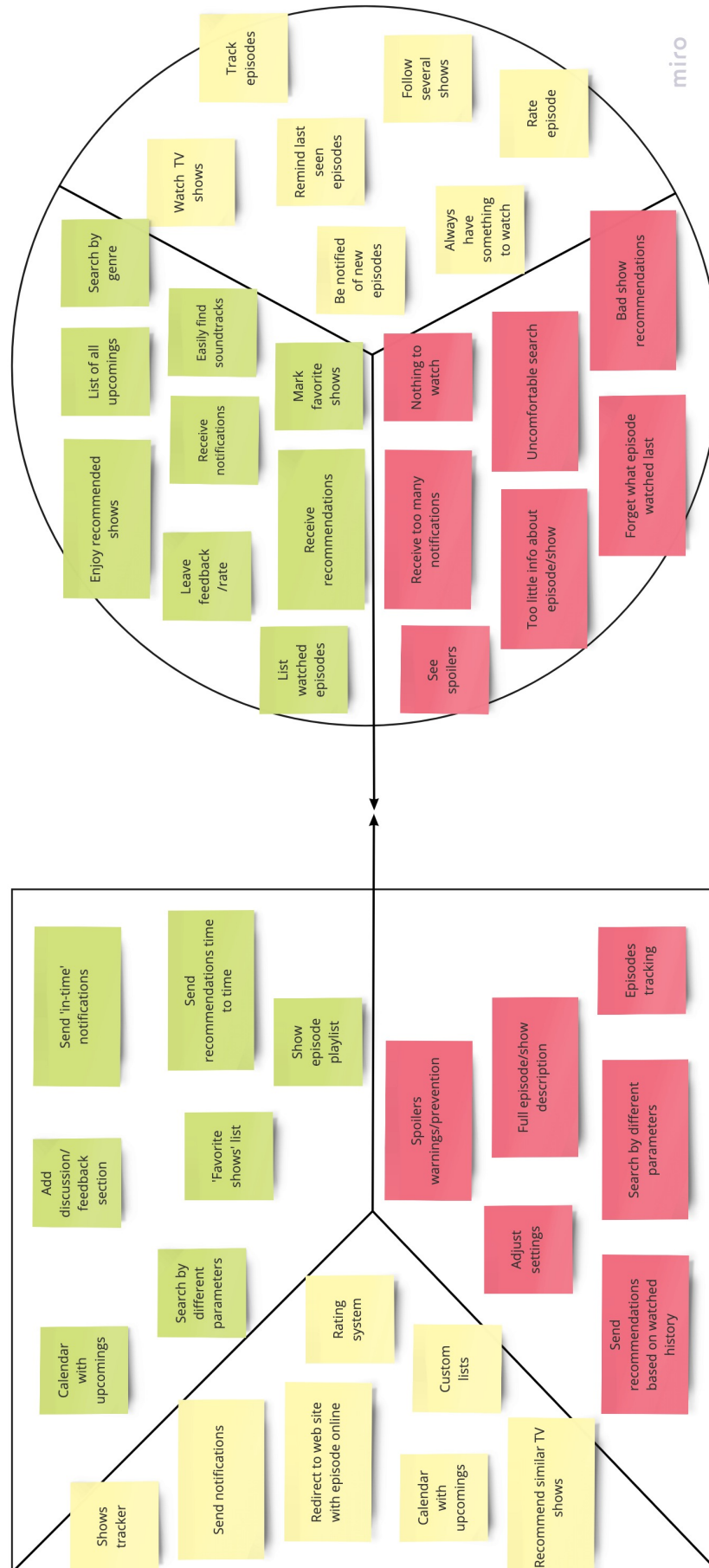


FIGURE 4.7: Value Proposition Canvas for the potential app users.

4.2 Implementation of the strategy

4.2.1 Personas

In this section, I came up with three persons of distinct age and with different lifestyles to extend my field of view of a perfect potential user more broader. According to the online survey I conducted earlier, a target audience is a group of people of age 18-25 years old. Nevertheless, we still should remember about the customers who are out of this criteria. I would even say that these people are alike the stakeholders who may have a small impact but high interest.

Let's explore the first persona (Figure 4.8). It is a 16-year-old schoolboy who spends all his free time watching television shows. Petro does not understand English very well, so he preferred watching his favorite show "Supernatural" in Ukrainian voice translation. He is one of those people who hate spoilers, but spending time on watching a boring TV show is the way more terrible for Petro, so reading the episode's comments before watching a new serial is above all. He keeps track of watched scenes in his chat-with-yourself in the social network, but sometimes he forgets to send the reminder-message it and then he still needs to rewind several videos while looking for the right one. Most of the watching time, Petro spends on the laptop and a little bit less on the smartphone.

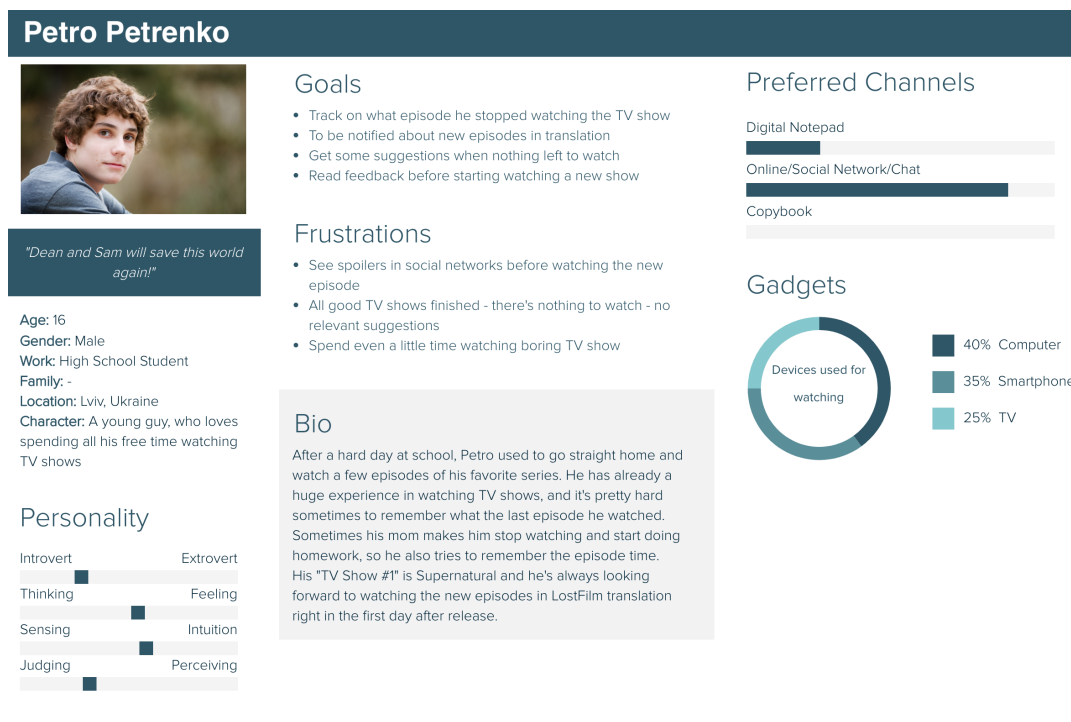


FIGURE 4.8: Persona: 16-year-old boy Petro Petrenko.

The second character is a 20-year-old girl (Figure 4.9). Her daily life is so busy that spending time watching TV shows is the best way to rest for her. She is an extrovert, who likes to share her emotions, funny scenes with others, especially when it comes to her favorite serials. She is actually that kind of person who takes an intensive part in the discussions. Even though she spends almost all the time by the computer, she would like to have an easy tool for tracking the shows as a mobile application, since the laptop will not always be around.

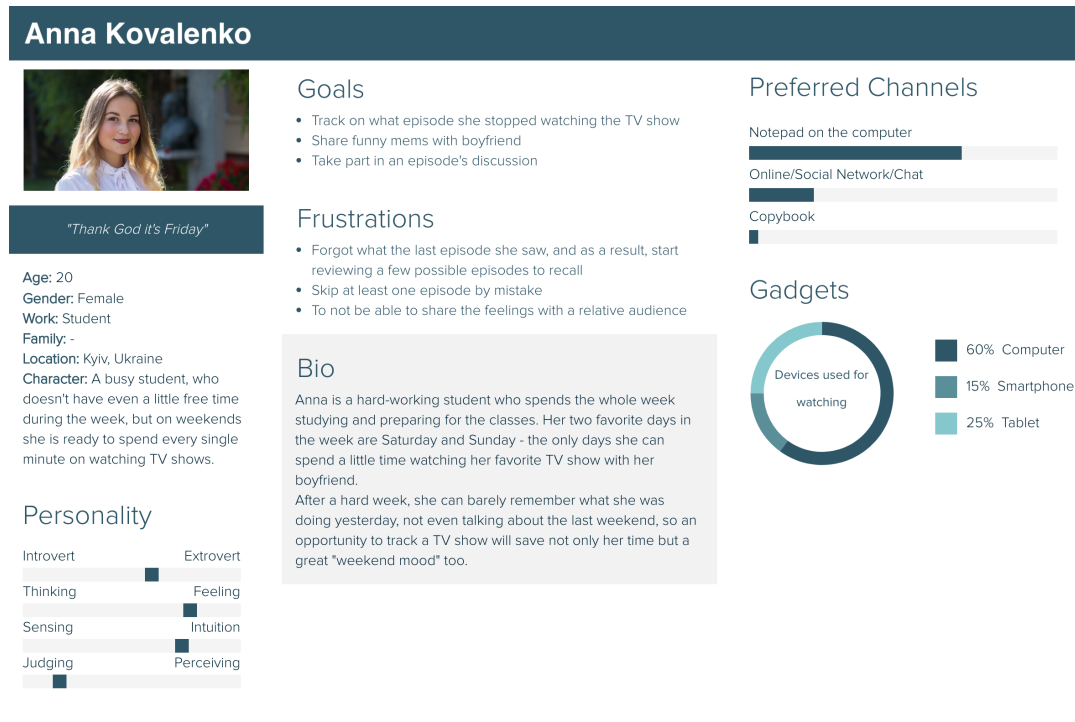


FIGURE 4.9: Persona: 20-year-old girl Anna Kovalenko.

The last one is a 32-year-old woman (Figure 4.10), who involves all her family in watching serials. Iryna is used to have everything under her control, but her daily life is full of events and business affairs that keeping track of watched episodes turns into a lousy headache sometimes. She does not like useless notifications, as during the day, she may lose more critical messages among the whole set of notifications on her phone. After the long working day, Iryna likes to lie on the couch in front of the TV and watch family series with her husband and kids. The old shows have already tired her, that is why she is always looking for something new. She is used to writing down the watched episodes in her notepad, but she would rather use the phone.



FIGURE 4.10: Persona: 32-year-old woman Iryna Martyniak.

4.2.2 Customer Journey Map

Before starting building the customer journey map (Figure 4.11), we need to define the steps that the end user is usually taking when achieving the goal. In our case, those steps are:

- searching for a show
- decision making and watching an episode
- installing the tracker app and exploring its functionality for the first time
- tracking the first show in our app

If everything went well and the customer stayed satisfied, at the end of the path, he would want to come back to the app again.

At each step, the customer feels and thinks something, finds his happy moments or pain points. Our task is to determine what relievers can cover these pains, create a simple route as possible, and make it user-friendly and intuitive so that the user has no questions and makes fewer movements.

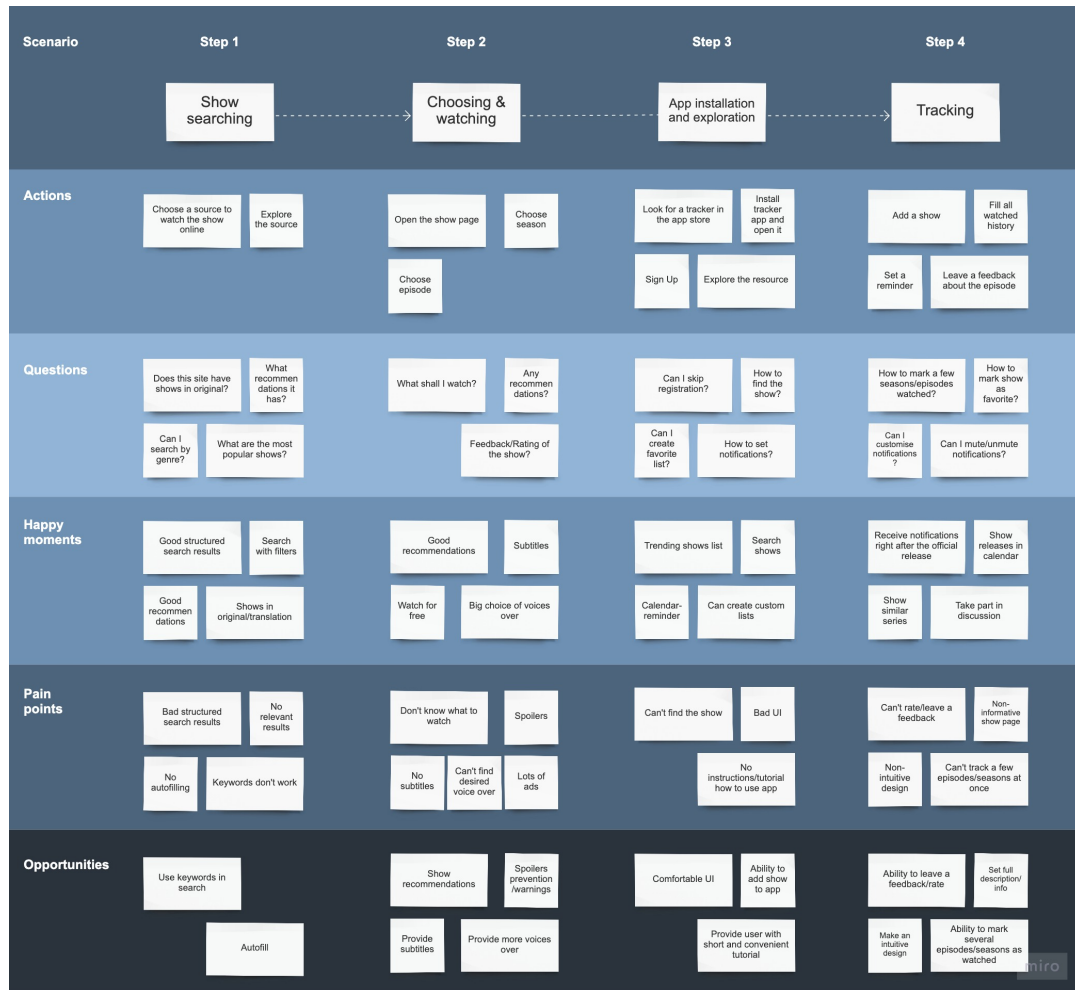


FIGURE 4.11: Customer Journey Map.

4.2.3 User Stories

- As a user, I want to have a tracker that can remind me of what episode I watched previously of a specific TV show.
- As a user, I want to receive notifications about all new episodes I am interested in, so I could be always up-to-date with my TV shows.
- As a user, if I have not seen the episode yet, I want to avoid spoilers, because it can reveal the episode plot.
- As a user, I want to get relevant recommendations, so that I would have always something new for watching.
- As a user, I want to receive notifications when an episode is published in voice-over so that I could watch the show in my language.
- As a user, I want to filter my search results, so that I could find a new show among series similar in the genre (plot, cast, etc).
- As a user, I want to have a calendar with all releases dates, so that I do not need to remember when a specific episode is coming out.

-
- As a user, I want to take part in the episode discussion, so I could share my opinion/feeling about the plot and actors play.
 - As a user, I want to mute some notifications, when they become too annoying for me.
 - As a user, I want to see my statistics, so that I know how much time I spend on TV shows.
 - As a user, I want to see a playlist, so that I could find the soundtrack from the episode.
 - As a user, I want to see the TV show rate/description, so that I could decide whether to spend time watching this show or not.
 - As a user, if I haven't finished watching the episode, I want to put the time mark, so that I could continue watching next time from the right moment.
 - As a user, I want to create a "Favorite shows" list, so that I could reach my favorite series faster.
 - As a user, I want to see the episode promo trailer, so that I know what the scene is going to be about.
 - As a user, I want to see the trending TV shows list so that I know what series are popular nowadays and could start following them.

4.2.4 UML Diagram

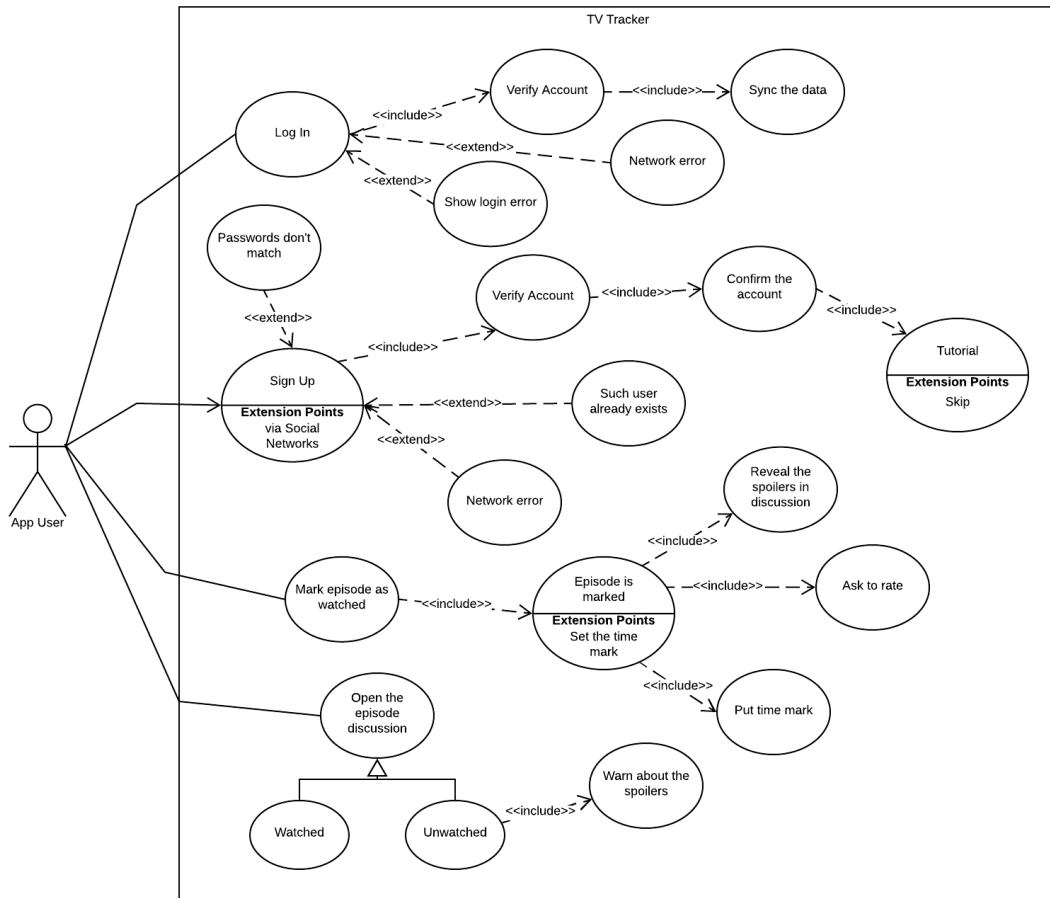


FIGURE 4.12: UML Diagram.

4.2.5 Information Architecture

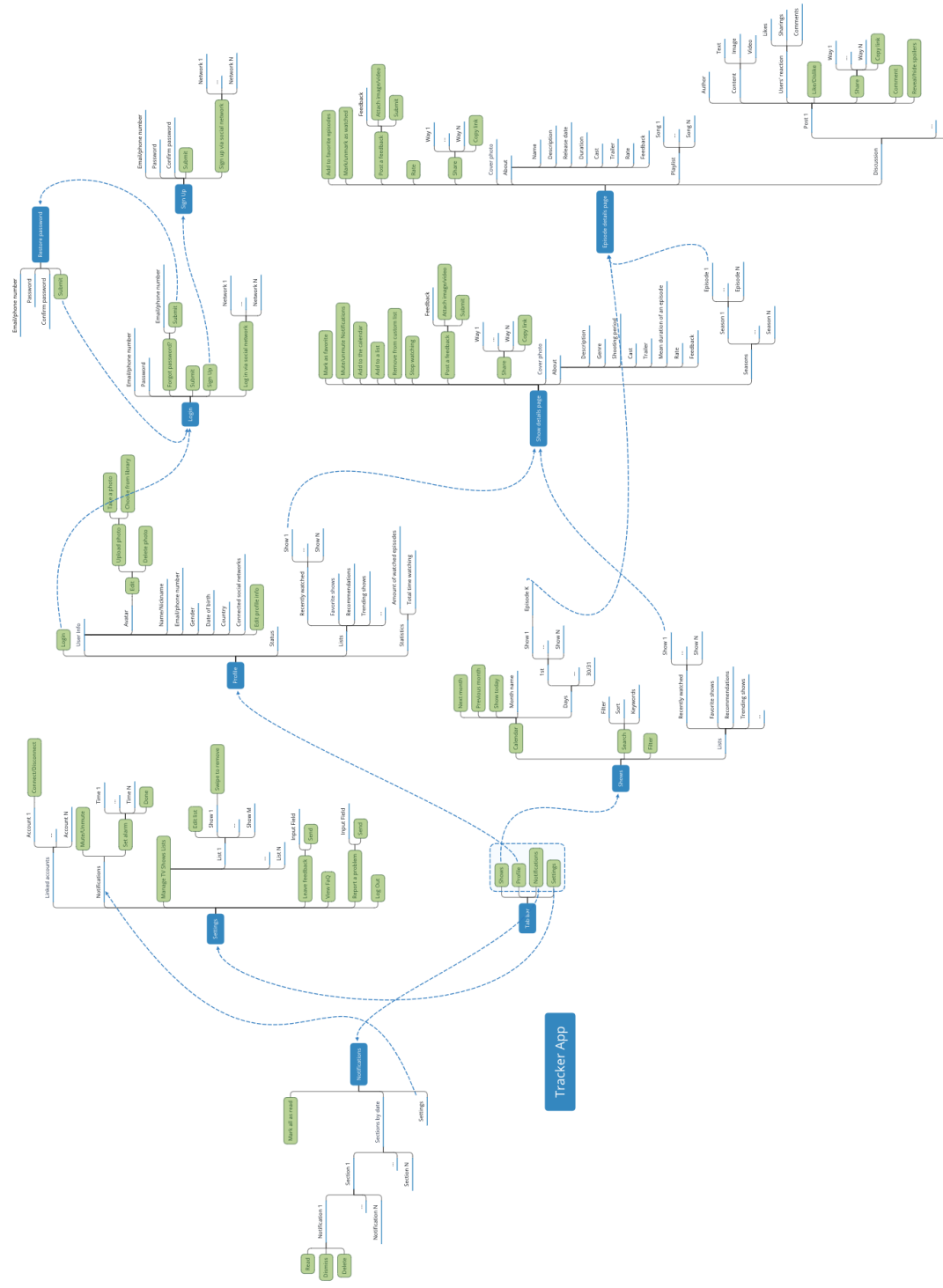
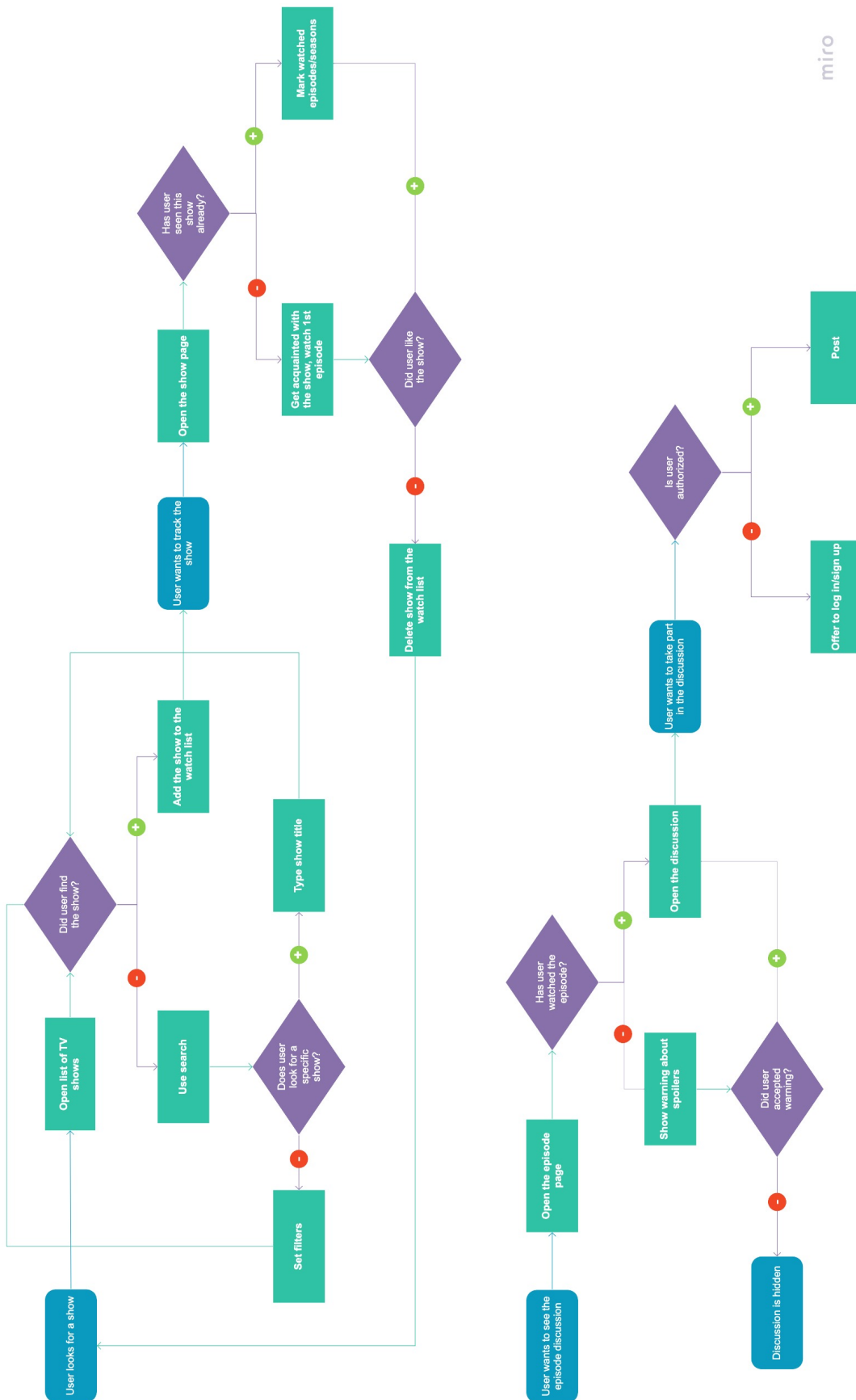


FIGURE 4.13: Information Architecture in XMind Zen.

4.2.6 User Flows



miro

FIGURE 4.14: User Flows.

4.2.7 App Prototype

The prototype includes four main sections - profile, explore, notifications, and settings tabs, and they are our primary navigation in the application. Initially, the user needs to sign in or sign up if he previously hasn't used our program. There are two ways how to register an account. The first one is directly in our app, entering email and password, and the second way is via Facebook, Gmail, or Twitter.

The profile tab (Figure 4.15) contains user basic info - nickname, avatar, stats of how much time the user has spent watching TV shows and what the total number of watched episodes is. Also, depending on the user series history, he is set a status Bronze, Silver or Golden, etc. Viewer. Right after this, you can see the "Your next episodes" section that has all the episodes that the end user needs to watch next. Besides, this screen has two necessary lists - "Recently Watched" and "Upcoming" and all the list the customer added manually ("Favorite", etc.)

The explore tab (Figure 4.16) is the page for searching and discovering new content. The releases calendar is placed at this page too so the user can review the upcoming scenes there at any time. There is an ability to filter the results by several parameters. It also can be expanded in further development. From this tab, the user can navigate to a serial's details page (Figure 4.17). Each such page contains the main info about the show (plot, genre, rating, trailer), its cast and post discussion. The user can mute or unmute the specific series or share it outside the app. From that page, we can navigate to seasons where we can go to an episode's details page (Figure 4.18), which also has the description, trailer, discussion, and rating. If the user wants to open the discussion and the episode is unwatched, he will receive the alert with a warning about the possible spoilers.

The third part is the notifications page (Figure 4.19). The stack of notifications that the user has received is saved in that tab. All items are grouped by date for more straightforward navigation. The user can read the message by swiping it or tapping on it. If he presses, the modal with more text appears.

And the last one - settings (Figure 4.19). This section is responsible for setting up the local and global service's setups. There are three parts - Account, App, and Other settings. "Other" tab is a more informative page that contains additional info about privacy and legacy, contact, frequently asked questions, etc. The "Account" tab has the setups for the user account related data (change email, change password, profile privacy, and integration with social networks). The App part sets up notifications and posts activities (likes, shares, comments). It also has local language setup and custom lists manager.

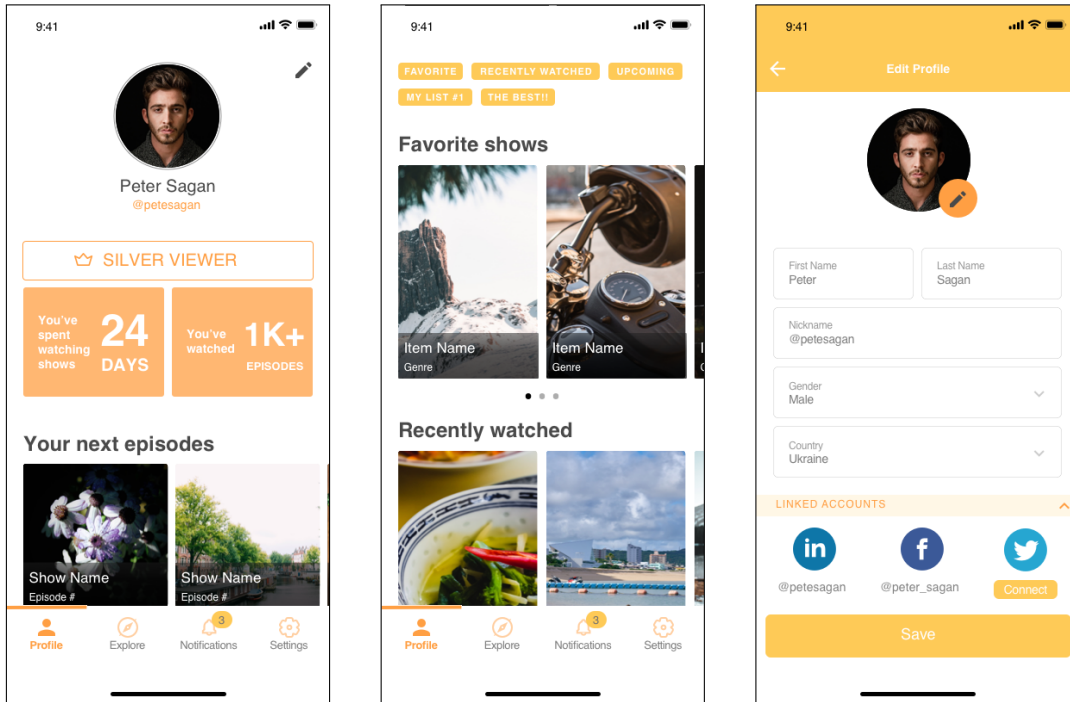


FIGURE 4.15: Profile screens - user profile, lists navigation and editing profile.

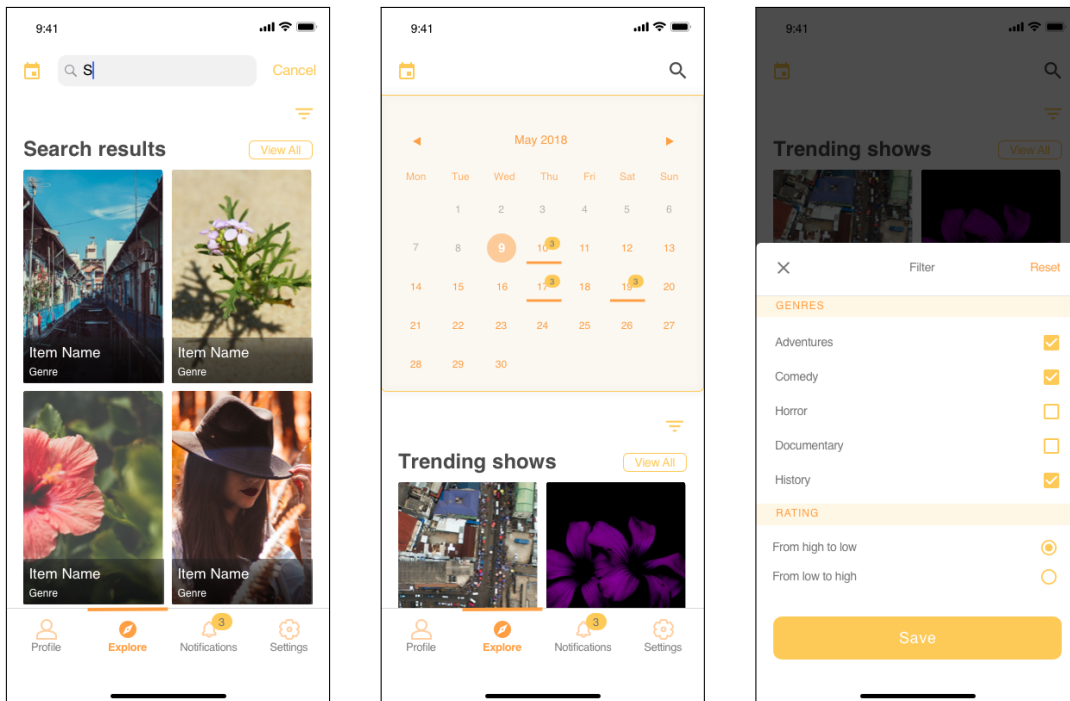


FIGURE 4.16: Explore screens - search results, calendar of upcoming and filter results.

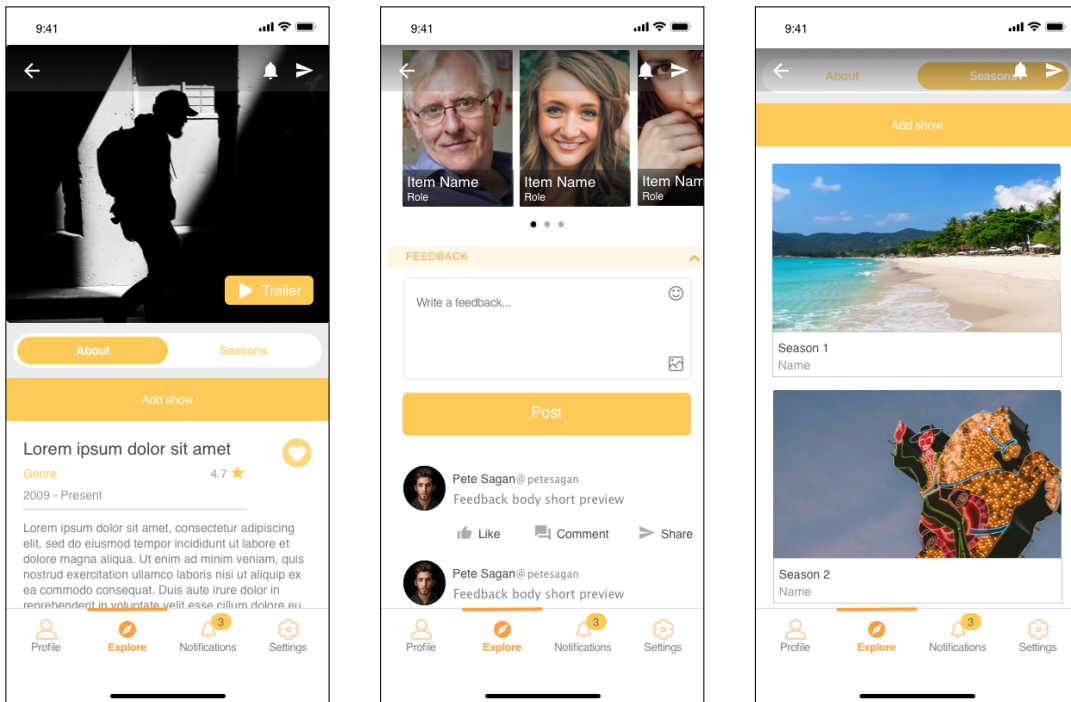


FIGURE 4.17: Show details page - about tab, feedback section and seasons tab.

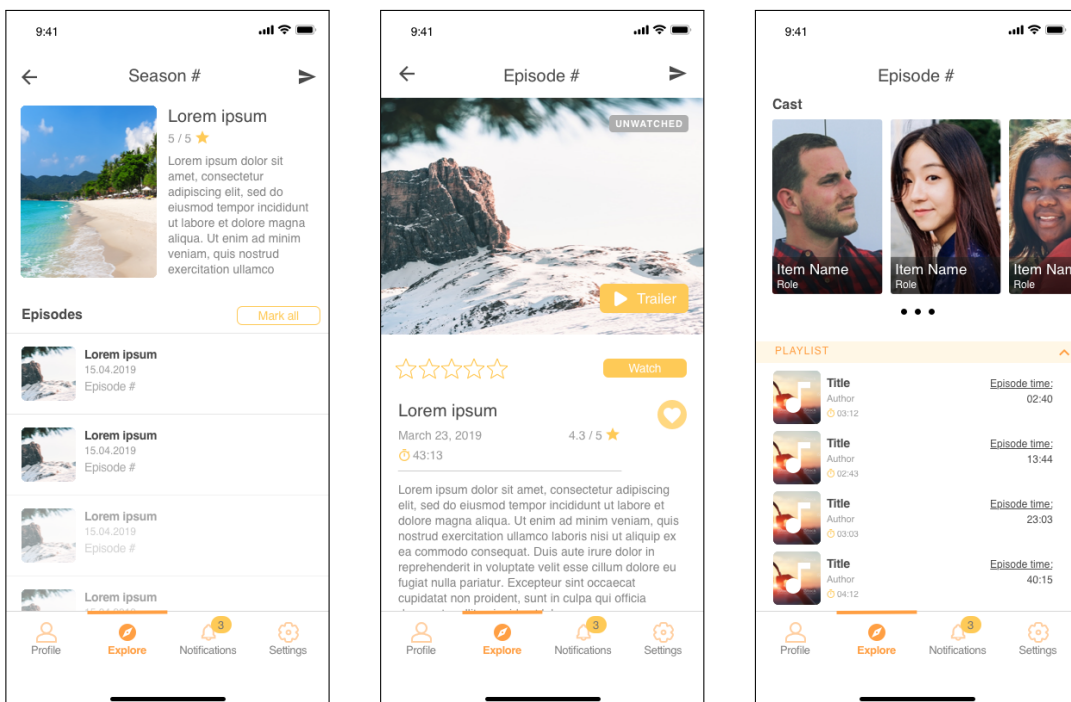


FIGURE 4.18: Other details pages - season details, episode details with feedback section.

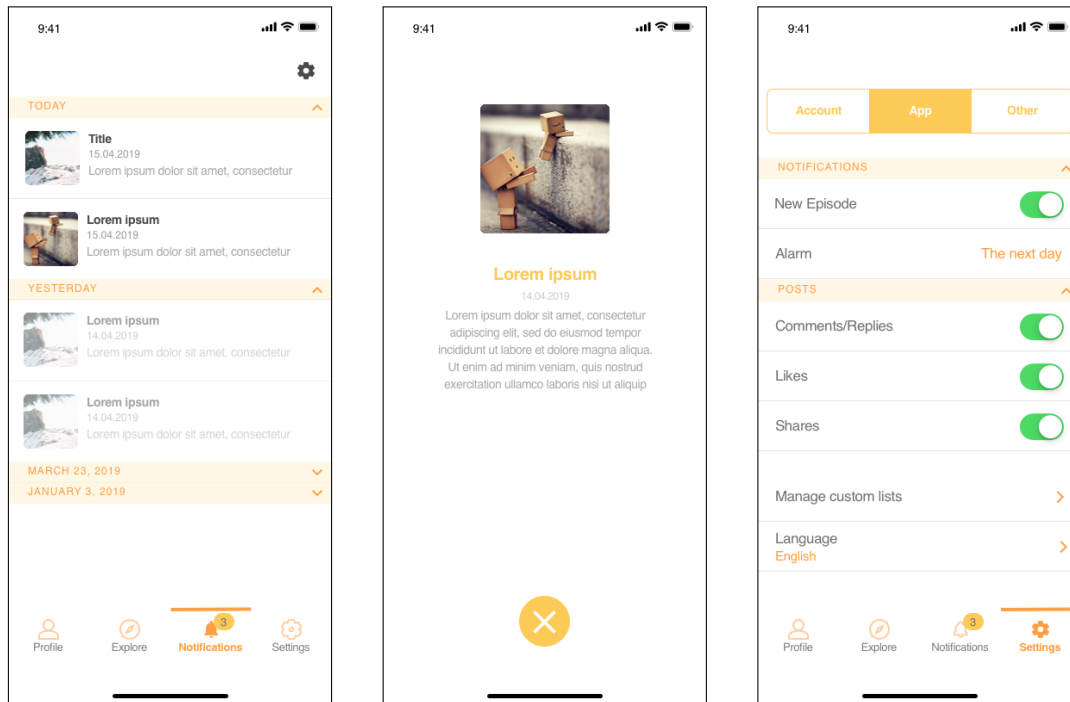


FIGURE 4.19: Notifications and Settings pages - notifications list, specific notification page and settings tab.

Chapter 5

Summary

In this thesis, I discovered primary UX and UI processes in building the mobile application prototype. It required me to research the market, determine the level of competitiveness among the most famous opponents in the study field, and define the strategy that will help to succeed.

During the initial research, I surveyed potential customers to gather data about the target audience and its needs. Based on the retrieved results, I was able to do a more in-depth user analysis and select the project goals and the path to walk towards the successful design.

After I made the assumptions that were visualized through the user flows, information architecture and, finally, mockups that can be appropriately validated by an end user. The validation step refuted some of my assumptions as well as confirmed some, too. After the first testing in the real environment, I have made changes to the prototype, as the end user feedback is essential in the design development.

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