PHENICX

PHENICX prototypes, phase 1

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PHENICX

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Executive Summary

In this deliverable, we describe the first efforts towards a tangible integrated prototype which combines advances of the PHENICX project into a user-ready presentation form placed in a clear use context.

As the PHENICX project focuses on digital techniques to make classical music accessible to broader audiences, it is essential that already during the lifetime of the project, potential audiences will actively be able to give feedback on any potential digital technique developed within the project. Instead of building and testing single demonstrators for each isolated academic advance (or even, use case from Deliverable 2.2), it is more practical, more realistic and better understandable to a non-technical user to combine techniques into an integrated experience with some clear use cases connected to them.

At each of the remaining PHENICX milestones (M18, 24, 29, 34), a release of an integrated prototype is planned, to be presented and tested at a dedicated public PHENICX event. As for the content of each of these prototypes, the choice was made to move from an initial post-live focus in M18 towards increasingly live use contexts. Furthermore, existing use cases of the PHENICX project were grouped together based on maturity, fit into intended use context and potential controversy, following from the focus group feedback obtained before M18 of the project. Technology which could be considered controversial (e.g. personalisation, or even just the act of using mobile devices live in a concert hall) was prioritised to be presented as early as possible (where necessary, in mock-up forms) to audiences, such that the reasons for controversy will be concrete as soon as possible, and iterations can be made that hopefully can alleviate this controversy.

The considerations above led to a first prototype combining program notes and timed information, timeline marking of interesting moments, visualisation of orchestra activity, synchronised score-following, focus possibilities on audio and video of individual musical sections or players, and the opportunity to compare a performance against recordings of other performances in an interface mostly targeted at desktop/tablet usage. This interface is currently presented as a click model, such that the feature feel and interaction can be assessed early, and subsequently optimized towards a real interface, which should be ready no later than in the beginning of 2015.

Next to this prototype, a mobile interface is presented allowing listening to audio commentary and timed program notes, as well as the option to mark concert highlights live during a performance. Due to the controversial nature of using mobile devices live in a concert hall, this interface is intended for practical testing at the first public presentation of the prototype already.

The public PHENICX event to which presentation of (and first tests with) the prototype will be connected will be the first RCO Essentials concert on October 11, 2014. This event will feature an info lounge where users can interact with the desktop/tablet interface, as well as a selected live test involving mobile device time marking in the hall. Formal and informal user feedback acquired from this event and further potential presentation events (such as the ISMIR conference) will guide the iteration towards the following prototype milestone in M24, and any intermediate releases before it.

1 BACKGROUND

Within the PHENICX project, various academic directions are being investigated. As indicated in the Description of Work, individual intermediate outcomes can suitably be shown to academic peers and restricted user audiences in the form of prototypes. As indicated in Deliverable 2.8, integration of prototypes into *Integrated Prototype Systems* will be useful for putting individual advances in a user-oriented context, which can appropriately receive feedback from intended users.

The current deliverable reports on the current status in moving towards Integrated Prototype Systems. In close collaboration with all academic partners, a full integrated prototype-oriented schedule has been sketched in which (potentially preliminary) results fitting the various use cases as defined in Deliverable 2.2 will be combined. We give an outline of the overall plans and foreseen dissemination opportunities to bring prototypes to actual audiences, and extensively report on the status of the first prototype involving click frame mock-ups for an integrated post-concert experience, as well as a mobile interface allowing for first interaction options during a concert. Finally, we discuss dedicated dissemination targets for the first prototype.

INTRODUCTION

1.1 Main objectives and goals

As the PHENICX project focuses on digital techniques to make classical music accessible to broader audiences, it is essential that already during the lifetime of the project, potential audiences will actively be able to give feedback on any potential digital technique developed within the project. Some of the academic advances within PHENICX have relevance to multiple use cases at once, while at the same time, techniques from multiple different work packages may cater to a dedicated use case. This is why integrated prototypes – which combine multiple academic advances, but embed them in an integrated experience with some clear use cases connected to them – are considered to be a very suitable means to present advances in the project in an understandable way to potential users, while soliciting the desired user-related feedback from them.

In this deliverable, we describe the first efforts towards a tangible integrated prototype. An overview is given of the general planning of prototypes over the timeline of the project, after which we zoom in to the first prototype, describing how the planned features of a desktop/tablet interface are featured in a click model, and a mobile interface is being developed targeted at receiving additional early feedback on several non-trivial use cases. We will also outline how this prototype is planned to be brought to audiences making use of upcoming dissemination possibilities.

1.2 Methodology

Very early in the project, several use cases were established, which are expressed in Deliverable 2.2. Besides, it was already planned in the Description of Work that from M18 onwards, user-demonstrable prototypes should be made available, which should be ready for presentation at a dedicated public PHENICX event connected to the milestone.

As mentioned in the previous paragraph, rather than developing 9 different demo applications, when bringing the novel envisioned technologies corresponding to use cases to audiences, it would make more sense to demonstrate integrated experiences combining related use cases and technologies (while retaining the original philosophies behind the individual use cases). Therefore, from the second semester (M6-12) of the project onwards, discussions were initiated on the most practical and feasible integrations to make, as well as possibilities to get very early feedback on concepts that according to focus group outcomes. This led to a global planning including some extra testing moments, which will be presented in Chapter 2.

Subsequently, more details will be given on the first prototype, its presentation forms, and its intended 'presentation stages'. Chapter 3 gives a general introduction of the prototype and global design choices that were made, Chapter 4 gives a detailed walkthrough of the desktop/tablet prototype functionality expressed in the form of a click model, and Chapter 5 describes a first prototypical mobile interface. In Chapter 6, the public PHENICX event to which this particular prototype will be connected, as well as further intended dissemination stages for presentation will be discussed. Finally, after a brief conclusion in Chapter 7, Chapter 8 will feature large design screenshots of the mobile interface.

1.3 Terminology

In the remainder of the document, as all prototypes discussed are integrated systems intended to become user-facing, whenever the word 'prototype' is used, this will in practice denote an 'Integrated Prototype System' unless explicitly indicated otherwise.

1.4 Convention

We use the following writing conventions:

- **bold** for emphasis;
- *italics* for newly introduced terminology;
- underlined for cross-references and references to other documents.

2 OVERALL PROTOTYPE PLANNING SCHEDULE

2.1 From use cases to prototype cases

In order to connect possible end results to tangible outcomes which would also be accessible to non-technical audiences, early in the project, the PHENICX consortium defined very concrete use cases which connected the scientific objectives of the different partners to actual end user situations. This gave us a firm grip on the many objectives and enabled us to focus on the end user even before we had tangible results to show. Furthermore, it bundled different objectives defined in the WPs into possible user scenarios.

For the next step – the delivering of the first prototype – it was necessary to transform these use cases as defined in Deliverable 2.2 into prototype moments that included different aspects of the existing use cases. In making a planning of what functionality should be available in which demonstrator, several considerations were taken into account:

- Maturity of functionality (technology that already is past a 'preliminary' phase is most straightforward to implement in a concrete prototype);
- Fit of functionality into an intended integrated use context for the prototype (for example, the first M18 prototype presented in this deliverable will most strongly focus on post-(live) concert experiences);
- Controversy of functionality following from focus group feedback so far, calling for early concretisation and mock-ups of plans, so potential users can verify their original stances and give early feedback (for example, functionality involving social data and personalisation was deemed controversial).

These considerations led to the following overall planning:

Use case	**M18 / 0.6 /D7.1**	M21 / v0.8	M23 / v0.9	**M24 / v1.0 / D7.2**	M25 / v1.1	**M29 / v1.2 / D7.3**	**M34 / v2.0 / D7.4**
Digital program notes (uc 1)	v1.0		v1.1	v2.0			v3.0
Virtual concert guide (uc 2)	v1.0	v1.1		v2.0			v3.0
Overseeing the music (uc 3)	v1.0		v1.1	v2.0			v3.0
Focusing attention (uc 4)	v1.0		v1.1	v2.0			v3.0
Comparing performances (uc 5)	v1.0		v1.1	v2.0			v3.0
Capturing the moment (uc 6)	v1.0		v1.1	v2.0			v3.0
Sharing the magic (uc 7)		v1.0		v2.0			v3.0

Becoming the maestro (uc 8)				v1.0	v1.1	v2.0	v3.0
Ediitorial support (uc 9)		v1.0				v2.0	v3.0

As can be seen, besides the planned milestones for deliverable prototypes and the final prototype, 3 extra intermediate releases have been added, giving opportunity for extra tests in real life situations and further possibilities to adapt and react to collected user feedback and connected research outcomes in an agile way.

2.2 Planned prototypes

The following subparagraphs give further information on the nature of planned prototypes over the course of the project.

2.2.1 First deliverable prototype D7.1: integrating isolated features: a click model & working mobile interface ready for testing

This first prototype will focus on post-live experience of a concert performance, which in this particular case will be Beethoven's Eroica symphony, performed by the Royal Concertgebouw Orchestra and conducted by Ivan Fischer. The prototype will both involve a desktop/tablet interface, as well as a mobile interface with a slightly different feature set, both of which will be presented in more detail in the following chapters.

As is this the first integration to be made, involving work by different partners, care was taken to not implement the more involved desktop/tablet interface right away, but to start with a detailed click model of the interface. This has two practical advantages:

- it allows us to concretely 'feel' the way integrated features are meant to work together;
- it allows us to collect user (and partner) feedback on integrated features embedded in the proper use case, even if they would not be fully implemented yet.

2.2.2 Extra prototype release: experiment with marker functionality during concerto

As became clear during the focus group sessions so far, the use of mobile devices in a classical concert setting during a concert was deemed highly controversial (and often, inappropriate) by the focus group participants. To investigate if such devices types are indeed considered as problematic, even though they may be able to meet some user information needs, it was decided to also push for an early functional mobile interface focusing on timeline features which can be consumed live, or used to enhance a post-live experience for people who attended the concert:

- Get text explanations during the performance (best to compare with editorial 'tweets');
- Get short audio explanations during the performance (audio commentary);
- Option to mark moments during the performance;
- Option to make notes on the timeline during the performance.

2.2.3 Extra prototype release: experiment with live score follower

In the last month of 2014 we plan to do a first test with providing a score follower during a live performance in a concert venue.

2.2.4 Second prototype D7.2: working interface for desktop, tablet and mobile

In the beginning of 2015 a first working version of the PHENICX interface will be ready for testing, after our intermediate prototype moments and the start with a click model gave opportunities to optimise interaction and features towards this release.

2.2.5 Extra prototype release: PHENICX lab, testing in real life

The prototype delivered in January 2015 will be presented to the targeted audience and tested in a real life situation during a performance of the Royal Concertgebouw Orchestra in the beginning of February.

2.2.6 Third prototype D7.3: working interface with added features

Iteration of the PHENICX interface, with updates of the existing features and interaction based on user feedback on the previous releases.

2.2.7 PHENICX prototype D7.4: The digital concert experience

Final version of the integrated PHENICX digital concert experience.

2.3 Foreseen interface presentation forms

The PHENICX prototype is set to provide a digital concert experience at multiple moments and locations. In isolated experiments it is possible that we might need other interfaces, for instance for doing a test with Google Glass or a smart watch. For the expected end user interfaces however, we will most explicitly stick to desktop, tablet and mobile phone interfaces:

Pre live	Live		Post live
	Home	Venue	
Desktop/tablet	Desktop/tablet	Tablet/mobile	Desktop/tablet

In case of different levels of knowledge, these don't necessarily demand a different interface, but in some settings, tailored information adapted to the needs and knowledge level of the user could call for a slightly different presentation of the information itself.

3 INTRODUCING THE FIRST INTEGRATED PROTOTYPE

3.1 Context

As mentioned in the previous chapter, the first integrated prototype will most strongly focus on the **post-live** experience of a concert. A user may have been at a concert and remembered (or, using the mobile interface, concretely marked) favourite moments over time – the prototype will present means to re-experience and rediscover the performance.

3.2 Functionality in relation to academic project tasks

The integrated prototype will include the following functionalities, connected to academic tasks in the project:

Personalised information according to musical knowledge. (Digital program notes and virtual concert guide; WP5; currently contributing academic partners: JKU and TUD). While WP5 is still in a preliminary phase and personalisation cannot be achieved through automated user profile matching and community detection yet, as this functionality was deemed controversial, it is useful to concretise it as soon as possible. To start with a personal property which should not be as controversial (and which would fit in well with work in WP3 and 4), the choice was made to have the prototype offer personalisation options based on the level of musical knowledge, which in the current prototype is offered in three explicit fixed levels: beginner, intermediate and expert.
A user has to tell the interface which level of knowledge about classical music they would count oneself to. This choice results in responsive information at multiple levels in the interface. Depending on this setting, the information in the program notes, the virtual concert guide or the compare recording feature will adapt to the chosen knowledge level, thus providing a simulated 'tailored' experience.

Timeline marking of interesting moments. (Capturing the moment; WP3-WP6; currently contributing academic partners: JKU). The 'capturing the moment' use case emerged as a potentially interesting feature during the use case discussions. While not formally connected to WP tasks as strongly as e.g. personalisation is connected to WP5, this use case has relation to any of the technical WPs: for example, one can think of (semi-)automated ways of marking (or learning from user-entered) interesting time points in terms of characteristics of a piece, or a performance in relation to other performances. To get an early first feel of what users would concretely mark when offered with such a feature, this functionality is included in the first prototype already.

Visualisation and score-following. (Overseeing the music and focusing attention; WP3, 4, 6; currently contributing academic partners: UPF and OFAI). In terms of visualisation, an orchestra layout is presented, showing the intensity level of the orchestra and individual players/sections over the course of a piece. Next to this, a synchronized score is presented over the full course of the piece.

Audio/video source separation and tracking. (Focusing attention; WP3; currently contributing academic partners: UPF and TUD). In a segment of the performance, instrumental sections can be muted to focus listening to particular parts at a given time. Next to this, one can visually zoom in to a specific section or musician, and then visually track this section or musician over time.

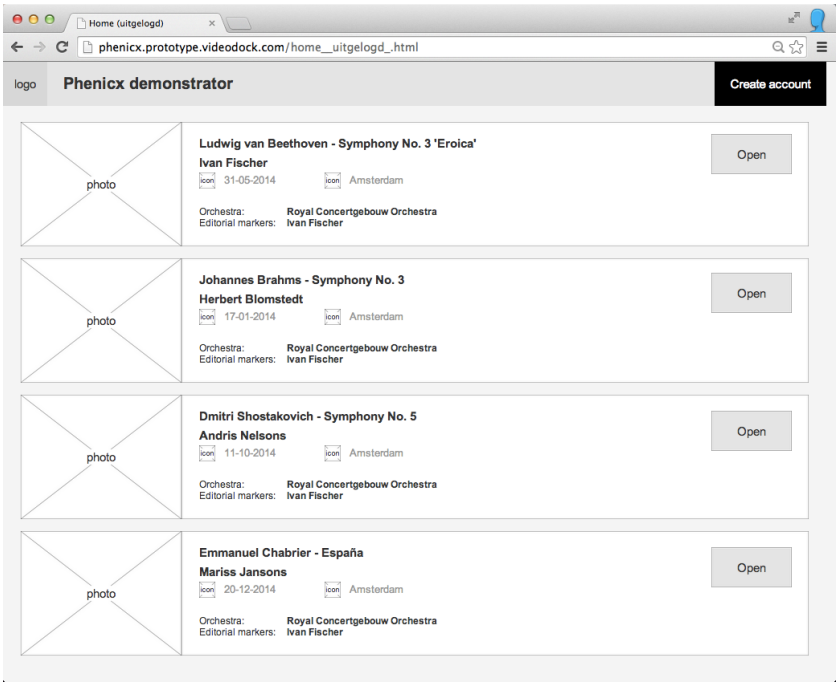
Performance comparison. (Comparing performances; WP4; currently contributing academic partners: OFAI). The particular performance is presented in relation to existing alternative performances.

Through a discussion of the click model, the next chapter will discuss how these features are integrated in the interface.

4 FIRST PROTOTYPE: CLICK MODEL INTERFACE WALKTHROUGH

In this chapter we walk through the click model per sector. The current version of the click model is available at http://phenicx.prototype.videodock.com/#p=home__uitgelogd_ .

4.1 Page landing: choose specific event to enter PHENICX experience



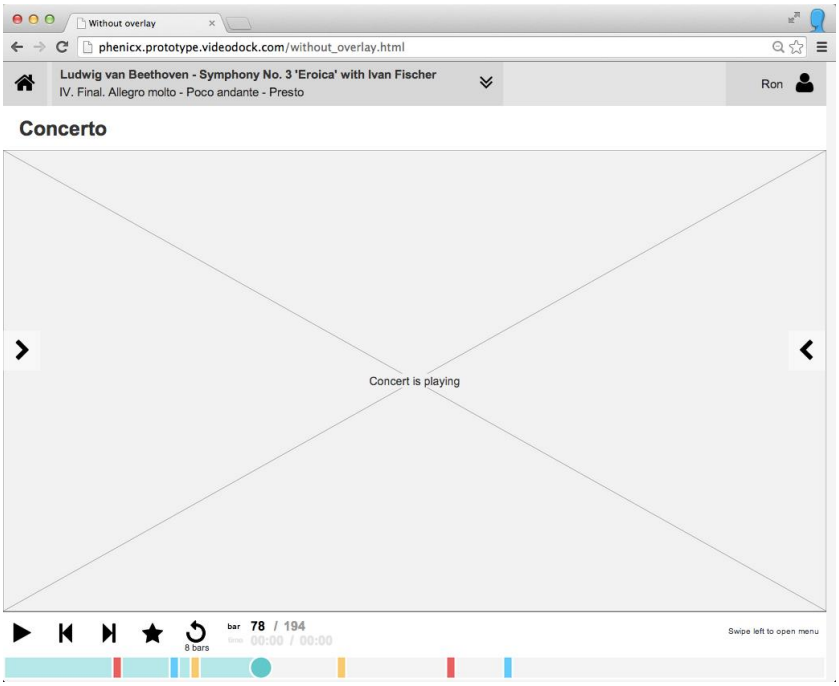
Screenshot 4.1: Start page and create account
*http://phenicx.prototype.videodock.com/#p=home__uitgelogd_*

Not the core of the experience, but a very important page nevertheless. The place where a 'digital' concert goer can select his/her concerto. It is also the place to login/create an account in order to enable personalisation of the experience.

4.2 The concerto: a clean concert registration with added features

When choosing a concerto in a post live situation, the first page is a clean concert registration that starts playing.

4.2.1 Bar notation as time guide

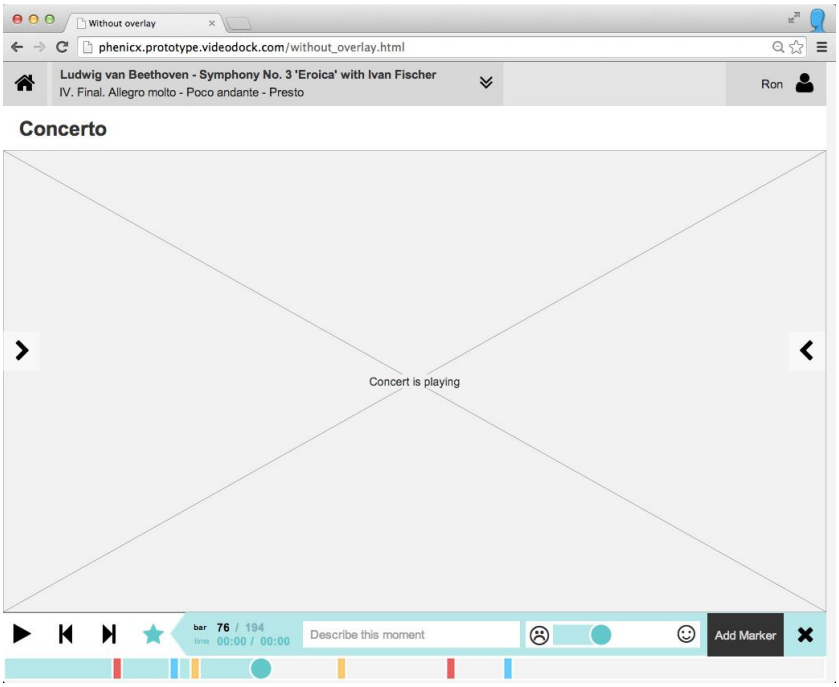


Screenshot 4.2: Clean concerto view with bar notation
http://phenicx.prototype.videodock.com/#p=without_overlay

While watching the concerto it is possible to explore the interface without stopping the concert stream. Build as HTML5 interface it will be possible to use swipe actions on tablets and mouse actions on desktops and notebooks. In the further explanatory text we will use the tablet experience to explain the interface and integrated features.
Even though we have the non-expert music lover in our minds, you see the bar notation as a time guide in the bottom player. Although this seems conflicting, we believe it is actually a blessing in disguise, especially when one wants to offer a guide even when there is not yet a video of the concerto available. Furthermore, in the focus groups held so far, it turned out that even users without score-reading skills typically liked a score visualization, as they felt it gave them a good insider's view into what was going on.
As stated, we've currently focused on the post-live experience in this click model, but anticipated on the pre-live situation where the scores are available, but not the recording. With the current setup it is possible to make notes on the timeline beforehand through this bar-

connection. Further iterations have to be made to make this feature useful for different levels of musical knowledge.

4.2.2 Placing markers at any moment



Screenshot 4.3: Marker bar at bottom expanded
http://phenicx.prototype.videodock.com/#p=without_overlay

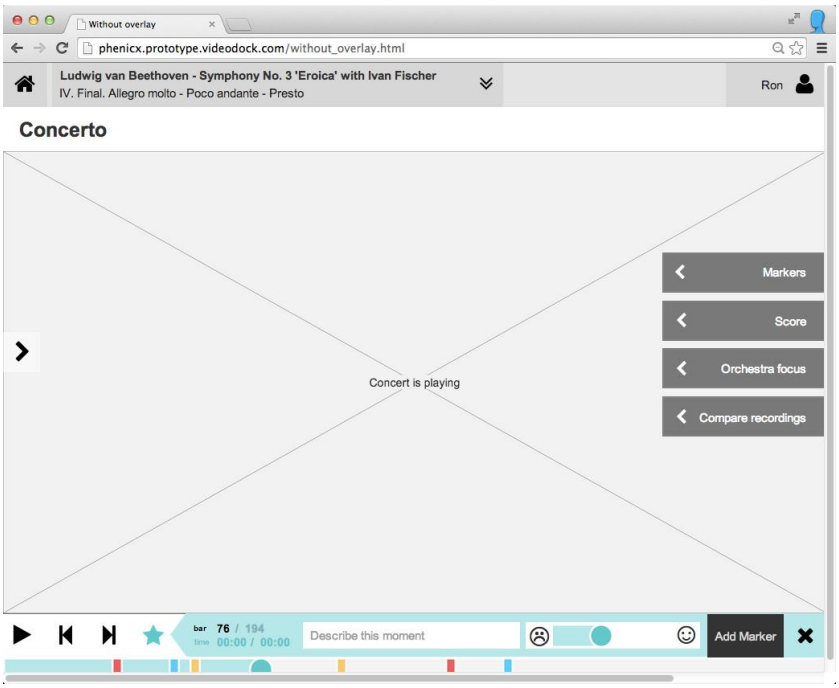
Even though there has not been a lot of academic work focusing on this functionality yet, it was chosen to prioritize it both for the tablet/desktop and mobile interfaces, as the focus groups showed that users could not clearly express yet if and how they would use markers. Therefore, the only way to grasp this in a better way is to provide a more concrete interface to the users and investigate how they will react to it.

In the current prototype, at any moment in time, it is possible to put a marker on the timeline and add a note:

- Before the concert one can make notes while studying the scores or some other pre-processed visualisation of the music
- During the concert, people at home can add markers and notes while watching the live stream
- During the concert, people at the venue can add markers through the dedicated mobile interface (see Chapter 5)
- After the concert, people can add and change markers and add and change notes (as explained in Chapter 5)
- It will also be possible to add markers to other recordings of the work (e.g. different conductor or location).

4.3 Timeline based menu: pull/swipe menu as overlay

When swiping to the left from the right side of the screen, you pull in the main menu with timeline based features:



Screenshot 4.4: Timeline based menu opened
http://phenicx.prototype.videodock.com/#p=without_overlay

4.3.1 Markers (commentary)

Add, edit, share, delete markers and notes & activate timed text guide

4.3.2 Score

View score synced to the recording

4.3.3 Orchestra focus

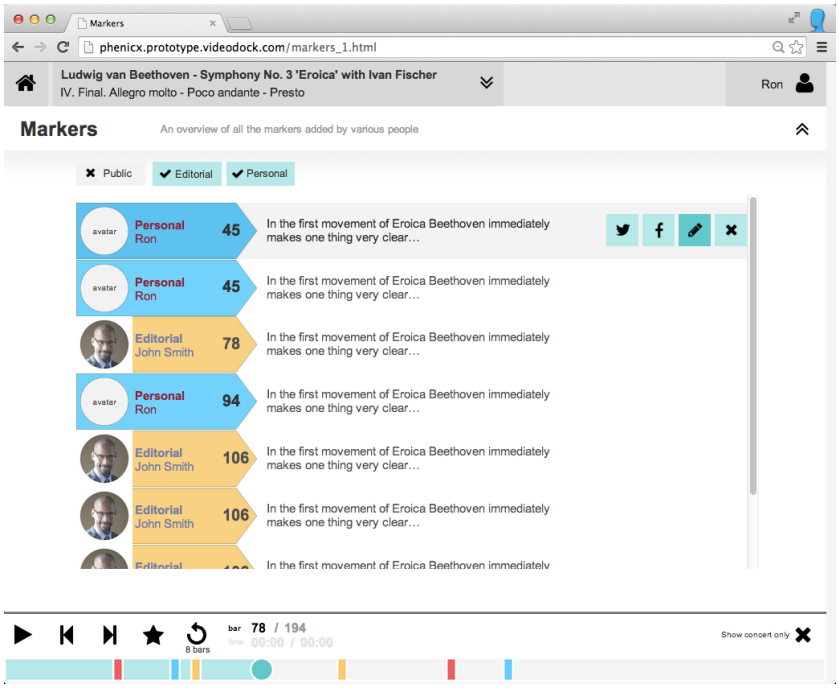
Overview of orchestra, zoom in at section or musician (isolate in sound as well as video)

4.3.4 Compare recordings

Compare central recording to other recordings of the same musical piece

In the following paragraphs we will further explain these assets.

4.4 Timeline feature: markers



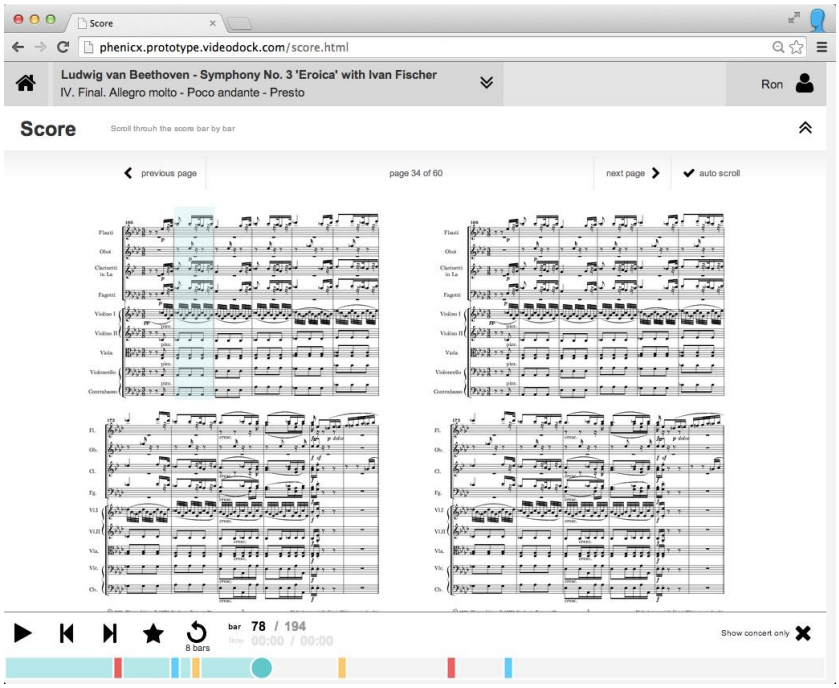
Screenshot 4.5: Markers view http://phenicx.prototype.videodock.com/#p=markers_1

While from the main play bar at the bottom a user can add a marker and a comment, within this window a user enters the extended features of the Marker function:

- It allows users to edit, share or delete personal markers
- It allows users to activate the textual guiding text feature and add markers or notes to the timeline.
- It is possible to choose different textual guide texts, such as an editorial text guide, but you could also activate your own personal notes or the notes of someone else as a text guide to the video. In essence it provides the interface for different types of text guides which could be provided through user profile matching, web information extraction, community detection and others in the future. Until that moment, the editorial notes will be delivered in three knowledge levels, thus creating a personalised experience.
- After minimalizing the extended marker menu, the selected text guide will be visible underneath the video as ticker tape.

Screenshot 4.5: Collapsed (ticket tape) markers view http://phenicx.prototype.videodock.com/#p=markers_1&c=1

4.5 Timeline feature: score



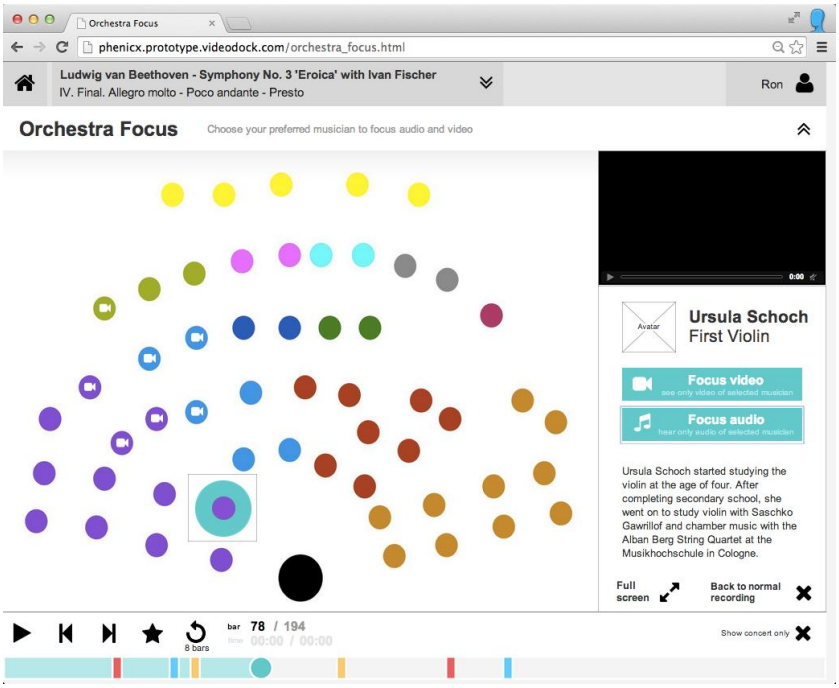
Screenshot 4.7: Score view http://phenicx.prototype.videodock.com/#p=score

As mentioned earlier, focus group responses indicated interest of users in seeing a score during the concert playback. In our prototype, the score follower is presented as a somehow individual feature. The technology behind the score follower allows us to synchronise other data to the timeline, even before the concerto has taken place. By using the score as a timeline and connecting the score to the actual recording, all other data connected to the score falls in place on the timeline of the recorded concerto.

Choosing the score menu will overlay the score with the bar guide. It is possible to:

- auto scroll the pages with the music
- scroll through the score page by page
- minimizing the score menu currently will just tell you where you are in the score. In the future we would like to add the selection function, which lets you select a specific instrument score that could be presented underneath the video.

4.6 Timeline feature: Orchestra focus



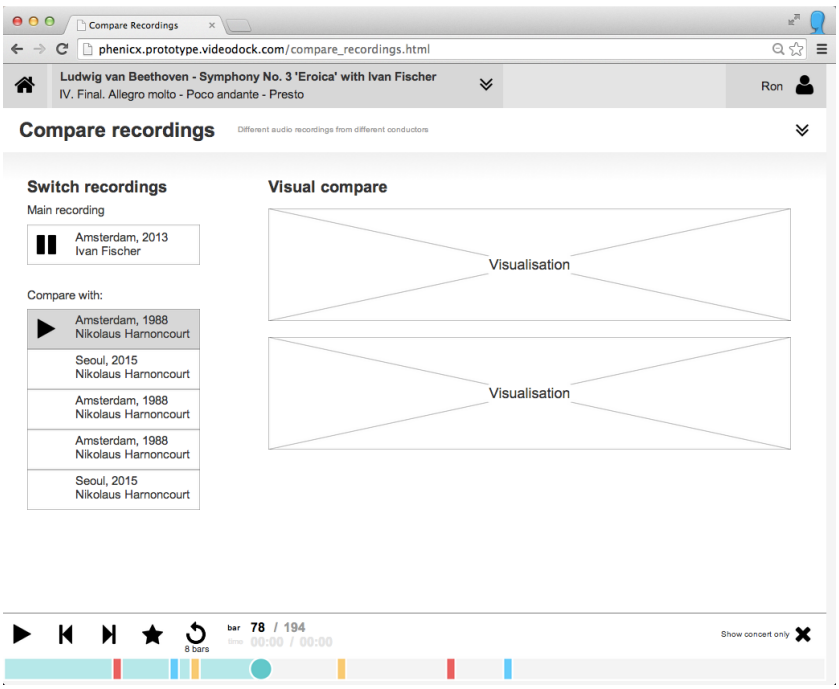
Screenshot 4.8: Orchestra focus view
http://phenicx.prototype.videodock.com/#p=orchestra_focus

The Orchestra Focus feature enables a user to become more aware of the specific parts which constitute a symphonic performance. This is useful for educational purposes at different skill levels: a novice can e.g. learn what instruments are playing and how they sound, while a professional musician can zoom in to a specific instrumental part. Initial focus group reactions to this functionality were positive, although there were some questions about how this would look and feel in practice, leading once again to early integration of this feature in the integrated prototype.

Currently offered functionality allows a user to:

- see intensity levels of the orchestra and individual players through the orchestra layout view
- visually zoom in at a specific musical section or musician and activate a specific video with this section or musician highlighted at all times
- mute/isolate the sound of instrumental sections, thus enabling the focus on very specific parts of the music

4.7 Timeline feature: Compare recordings



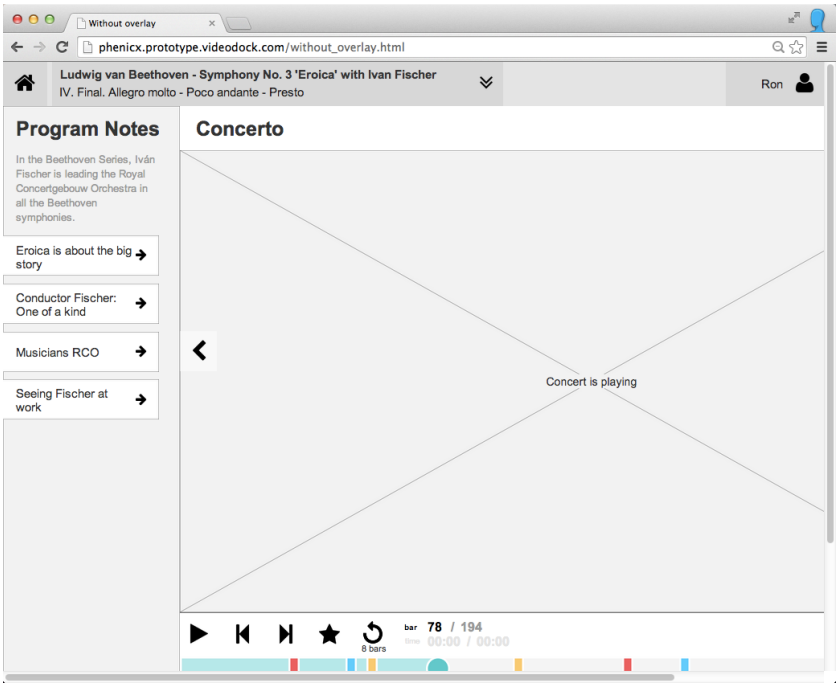
Screenshot 4.9: Compare recordings view
http://phenicx.prototype.videodock.com/#p=compare_recordings

The Compare Recording feature lets users switch seamlessly between two recorded versions of the same musical piece. It enables listeners to become aware of performance nuances, and e.g. clearly hear the difference between the Eroica conducted by Fischer vs. the Eroica conducted by Harnoncourt. These are aspects which expert users typically really love to study, while it can once again help novice users with 'learning what to listen for'.

Although the functionality itself is very clear, the integration of this feature is still in progress. It creates a principal conflict with the other features that are all focused on a specific recording, whereas the Compare recording feature is in fact a hub between two recordings.

Within this moment-focused experience it creates interactional dilemmas that haven't been solved yet. Looking at it from another perspective however, the Compare Recording function has the potential to create a cross-over between multiple concerto's and become a powerful portal that doesn't take a specific concert moment as starting point, but the musical piece itself. Imagine a place where the scores of all Beethoven symphonies are available and every orchestra can upload their own recording of one of the Beethoven symphonies, after which this recording will become part of the complete Beethoven experience, enhancing viewers to read scores synced to this specific recording, adding notes to this particular recording. A very tempting platform deserving further exploration, in particular on an exploitation and dissemination level.

4.8 Program notes menu: pull/swipe menu



Screenshot 4.10: Program notes menu
http://phenicx.prototype.videodock.com/#p=without_overlay

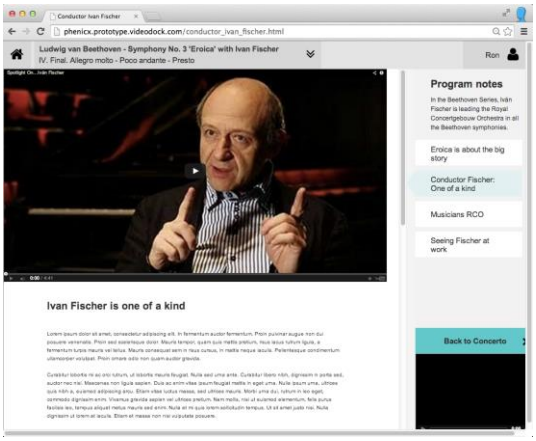
In the focus groups, users also indicated they liked to learn the background stories of pieces on a concert program. In this, they would especially appreciate texts adapted to their existing knowledge levels: for example, returning audience would like to learn new things rather than the same generic composer biography, while users without extensive musical background indicated they found it hard to read about music-technical terms. While work on personalisation is still in its preliminary phase, we already have been working towards a prototype of how program notes can be offered at different skill levels, and focusing on different aspects of the concert.
When swiping to the right from the left side of the screen, the program notes menu will be pulled in with information that is not connected to the timeline of the concerto. The interface reacts slightly different: it doesn't put the options as overlay to the video, since they are not directly connected to the video. Instead it pushes the whole video with timeline aside and gives one insight in the options you have, still without stopping the actual concert experience.

4.8.1 Eroica is about the big story

The first item within the program notes would be a story about the work, functioning as the digital artefact of the paper program notes you get at the venue. Big difference is that these program notes adapt to your personal situation. In this interface you get a different story, based on your knowledge settings. (This page is not clickable in the click model)

4.8.2 Conductor Fischer: one of a kind

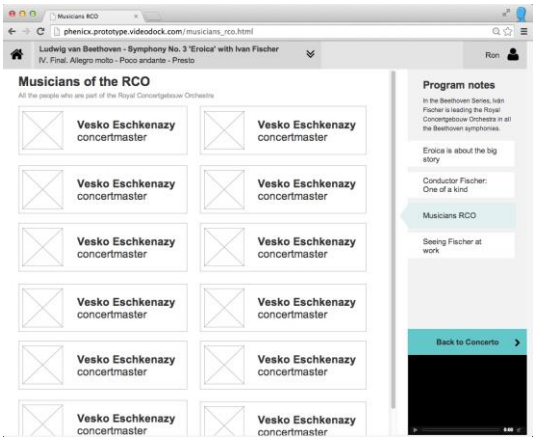
Fictional second story, with video content. Again the option to adapt the information based on the knowledge level.



Screenshot 4.11: Information page
http://phenicx.prototype.videodock.com/#p=conductor_ivan_fischer

4.8.3 Musicians RCO

Information page with second interaction level, giving the possibility to present biographies or information about specific instruments.



Screenshot 4.12: Musicians RCO page
http://phenicx.prototype.videodock.com/#p=musicians_rco

4.8.4 Seeing Fischer at work

Optional page layout with picture gallery. (This page is not clickable in the click model)

5 MOBILE INTERFACE WALKTHROUGH

In this chapter we walk through the mobile interface per sector. As stated earlier, the nature of the information device may be the biggest challenge in introducing digital artefacts during a classical concert experience at the venue, while it may also be one of the biggest opportunities if addressed properly. This is why we have chosen to push for a concrete mobile interface (intended for live in-venue testing) as soon as possible.

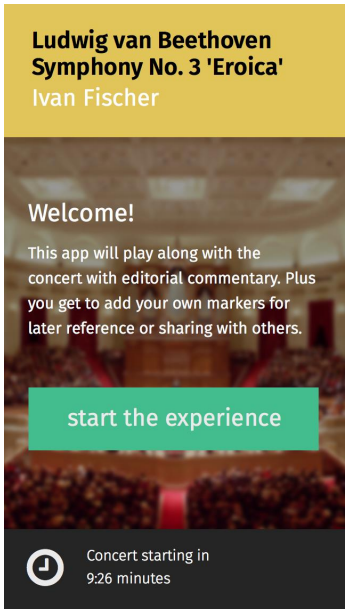
See Appendix 8.1 for a complete overview of all screens in the mobile interface in high resolution. The current version of the mobile interface is available at the following URL: http://app.phenicx.prototype.videodock.com.

5.1 Welcome: enter the digital program notes

Just before the concert starts, people can log in and enter a mobile version of the PHENICX experience that offers the following functions:

- get timed text that guide the visitor through the musical piece
- activate audio commentary, which basically is the audio version of the timed text
- add markers and notes to the timeline during the concerto

From the first round of focus group research we already received the feedback that mobile actions in the venue should be non-intrusive. What intrusive is and what not is of course very arbitrary and depending on the user itself. Many people will find any mobile device being active at a venue where classical music is being played as very intrusive. On the other hand, PHENICX is looking to attract a new audience as well, which may be more open (and accustomed) to the use of mobile devices.

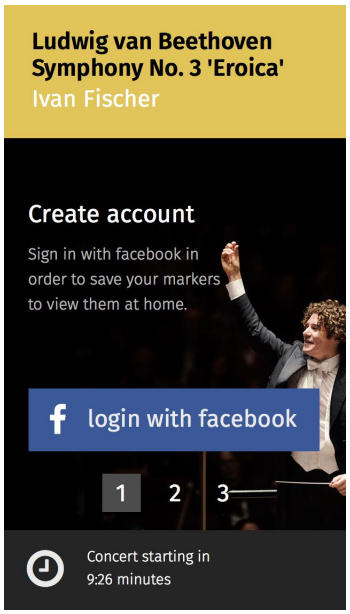


Screenshot 5.1: Welcome screen

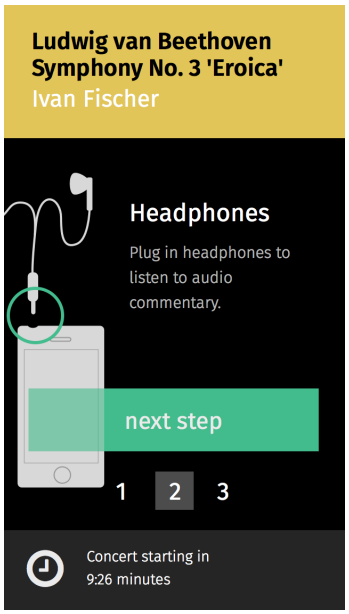
5.1.1 First steps

Before a user can activate the mobile experience in the venue, he has to go through three important steps, two of them focused on preventing the user from being intrusive to other visitors:

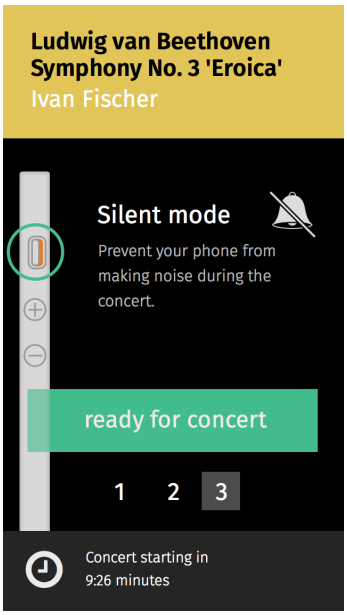
- log in (needed for making markers and personalised feeds)
- plug in headphones
- put the mobile device in silent mode



Screenshot 5.2: Create account



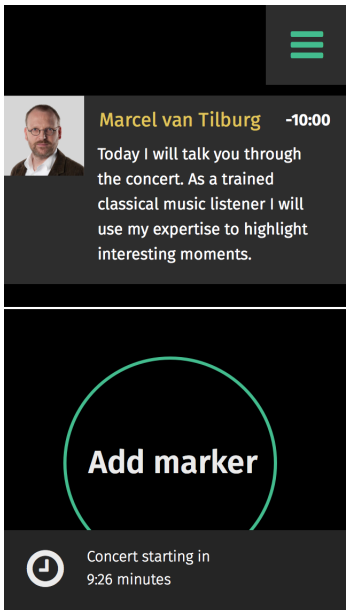
Screenshot 5.3: Headphones



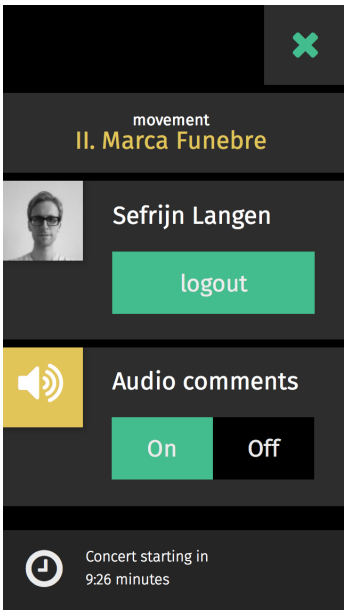
Screenshot 5.4: Silent mode

5.1.2 Read timed text

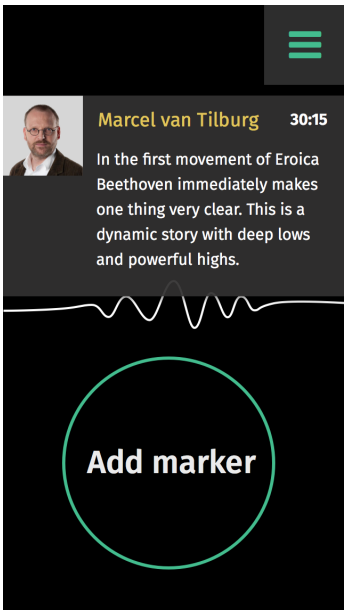
A set of comments connected to the score will be published during the concerto at exactly the moment they're relevant, thus guiding users through the piece. Based on your knowledge level these set of comments will be adapted. Every time a new message is published, the phone will use the silent vibrate function to point the visitor to it.



Screenshot 5.5: Pre concert marker



Screenshot 5.6: Menu with settings



Screenshot 5.7: View marker

5.1.3 Listen to timed commentary

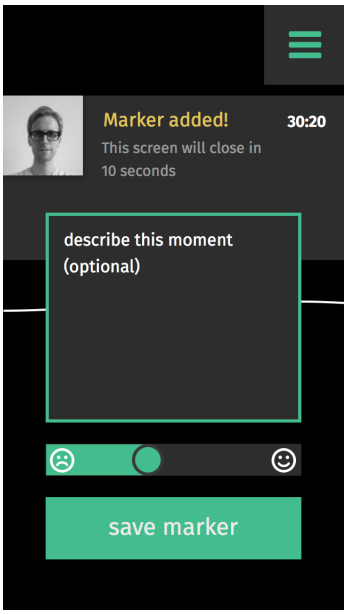
Reading during the concerto could be easy for some, very distracting for others. In order to test the best way to present this information, we've also added an audio version of these comments.

5.1.4 Adding markers and notes to the timeline

The last feature has already been explained in earlier chapters. During the concerto the interface will be more focused on marking without having to think about it by providing a big button that can be pushed whenever a visitor feels like it.

To give a bit more information to the marker, a user could add a simple preset tag or mood. In the current interface there is a mood slider, but the goal is to organise a little web study through Amazon Mechanical Turk for a first selection of the possible tags or slider options and then test this with the first beta testers in October.

The last option is to type a short note to a marker, such as "violin", "new movement" or "second theme".



Screenshot 5.8: Add new marker

6 ROADMAP FOR PROTOTYPE 1 PRESENTATION

In this chapter, we discuss at what venues the first prototype is meant to be brought to audiences to acquire the desired user feedback. In particular, we will focus on how it will be used in the first 'public PHENICX event', which will be linked to a public performance of the Royal Concertgebouw on October 11, 2014. After that, we mention a few other suitable opportunities for both dissemination and testing.

6.1 First public PHENICX event

On October 11, 2014, the *RCO Essentials* concert series will kick off, a special series of three concerts targeted at potentially interested concertgoers to whom a slightly less 'traditional' concert format would make attending a classical concert more attractive. The concerts start at a later time than usual (21 h instead of 20.15 h), will have a shorter duration than average (about one hour), features classical 'essential' masterworks, and offers a social drinks session afterwards.

PHENICX is planned to have sustained visibility at the RCO Essentials concerts, starting with the first concert. In a dedicated lounge, project information will be given. In concrete relation to the first prototype, a selected group of users will be recruited to test the mobile live interface of the prototype in a dedicated section of the hall during the concert. Next to that, in the PHENICX lounge, users will be invited to interact with the click model (and where possible, preliminary implementations of the 'real' interface if available).

To ensure that despite the ad hoc setting, user feedback is collected in a way as standardized as possible, a protocol will be set up in advance focusing on what usage aspects and feedback points should be investigated in particular. Next to this, the project should use its on-site visibility to recruit interested audience members to take part in any structured user-related follow-up experiments.

6.2 Other venues

Apart from the RCO Essentials concert, the prototype is intended to be presented at any other suitable venues where relevant feedback can be found. A different important stage will be the ISMIR conference, taking place in Taipei in the end of October. The prototype will be proposed for presentation at the Late Breaking/Demo Unconference session – depending on slot availability, either as a demo or as a broader unconference session focused on new concert experiences. This will allow for feedback from academic peers.

Next to that, further local presentation opportunities occur. The NEM summit has been considered, although this may financially be infeasible in the end. Alternatively, Delft University of Technology intends to have a 'Dig IT!' technology exhibit in November where the prototype can suitably be presented. Similar opportunities in the vicinity of the non-Dutch project partners are being researched and will be actively pursued as well where feasible.

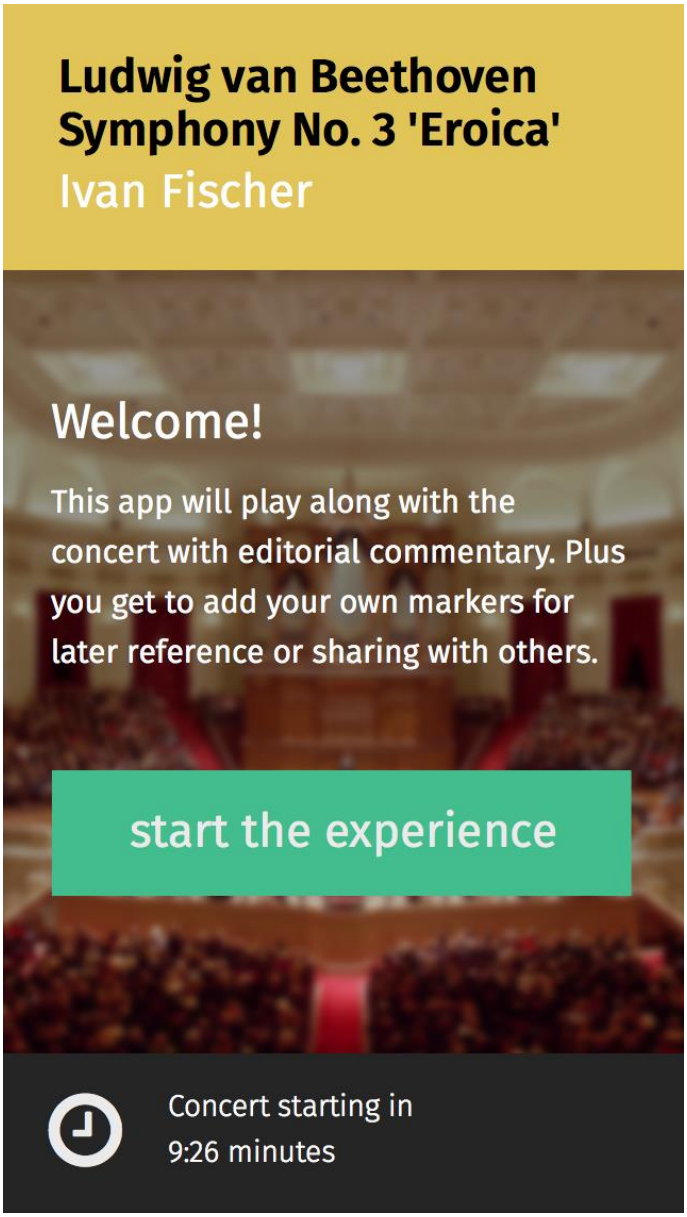
7 CONCLUSION

We presented an overview of the work towards the first integrated PHENICX prototype of M18. The current work gives way to immediate collection of preliminary feedback on the click model and first internal testing on the mobile interface, leading to audience-ready presentation and interaction results by the first public PHENICX event on October 11.

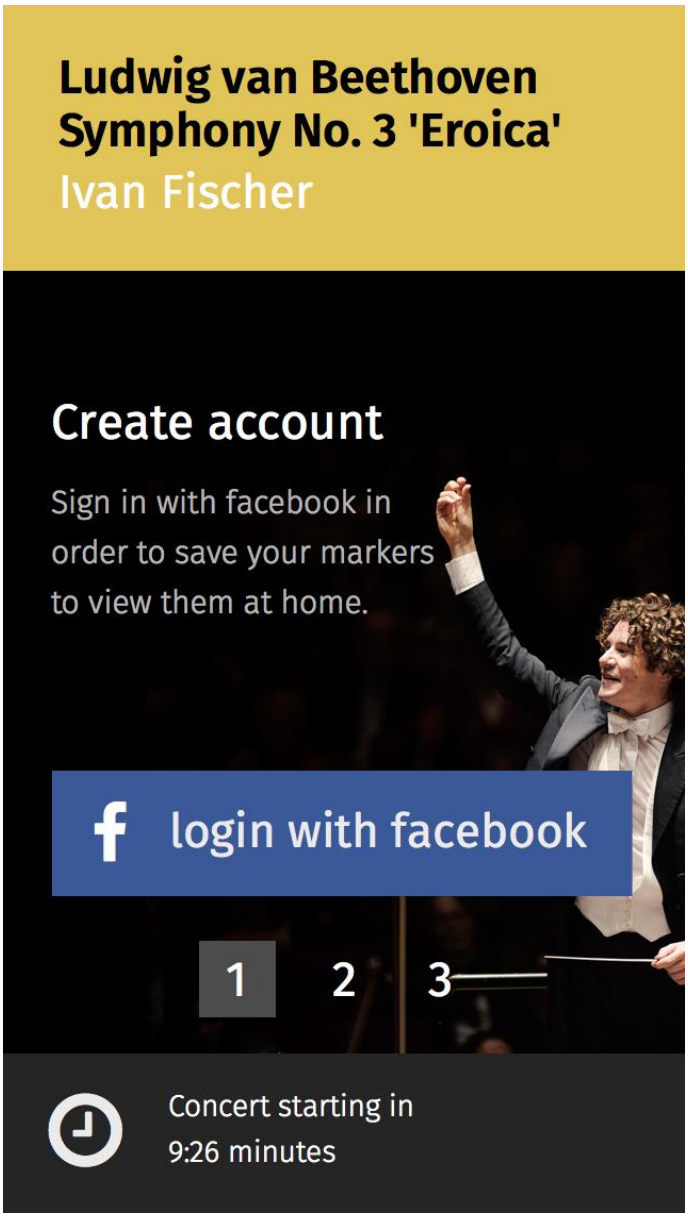
Based on experiences with this first prototype, by M24, an optimized new prototype will be presented in Deliverable 7.2, which also will make a stronger move towards live opportunities for the prototype. Furthermore, testing results obtained for the early prototype will give the first input for Deliverable 7.5, which will collect test results obtained for the integrated experiences.

8 APPENDIX

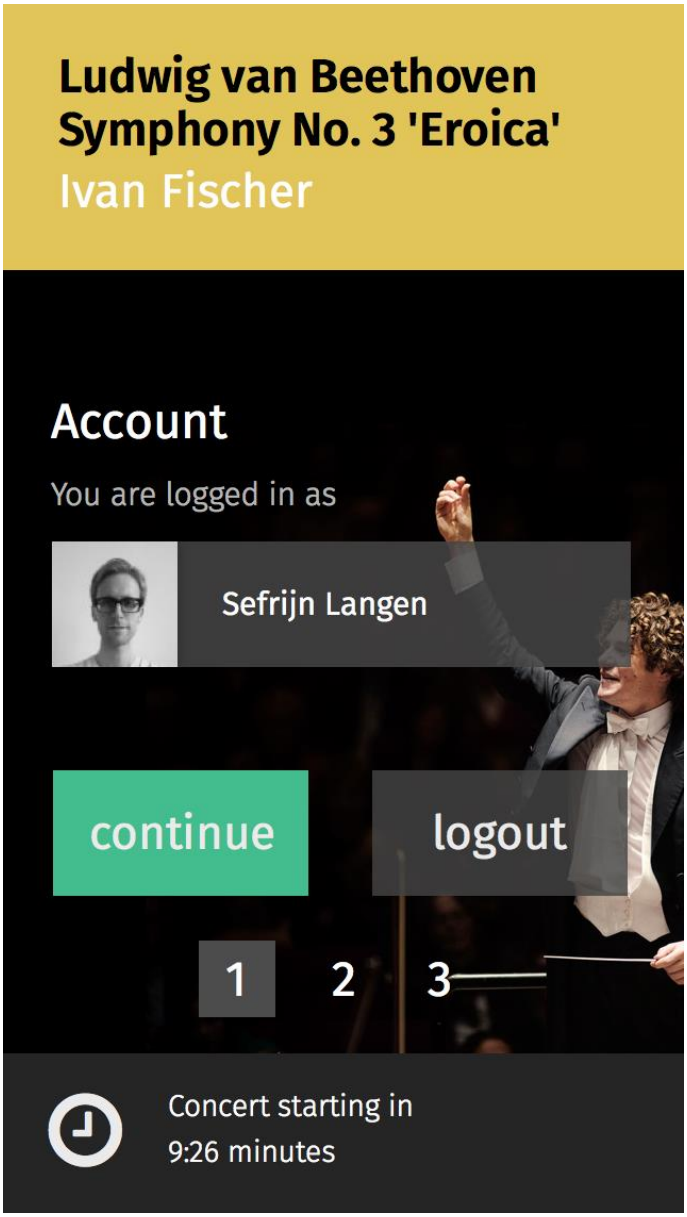
8.1 Mobile interface – Large design screenshots



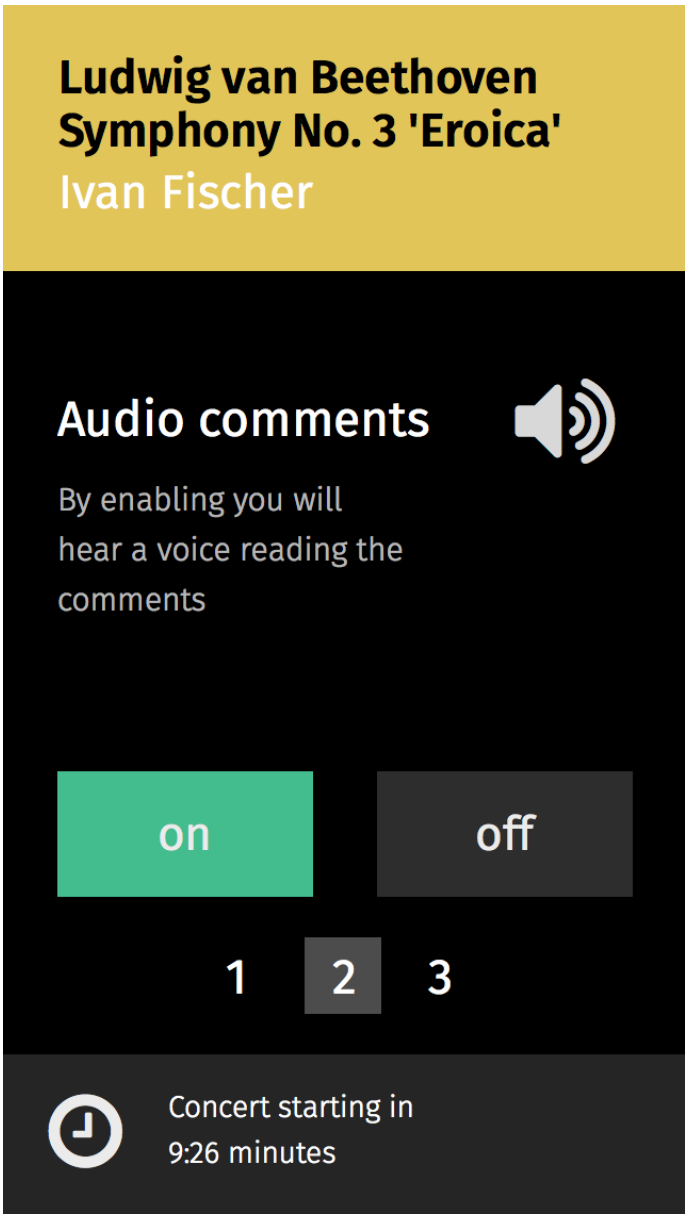
Screenshot 8.1: Welcome screen



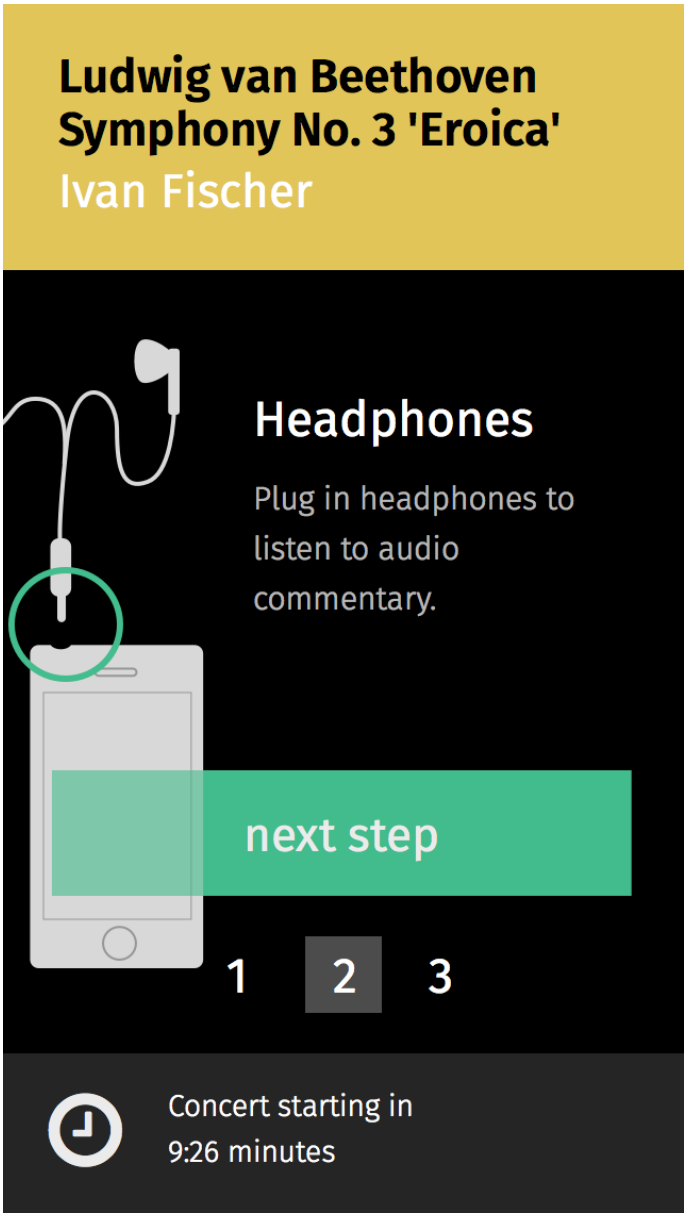
Screenshot 8.2: Create account



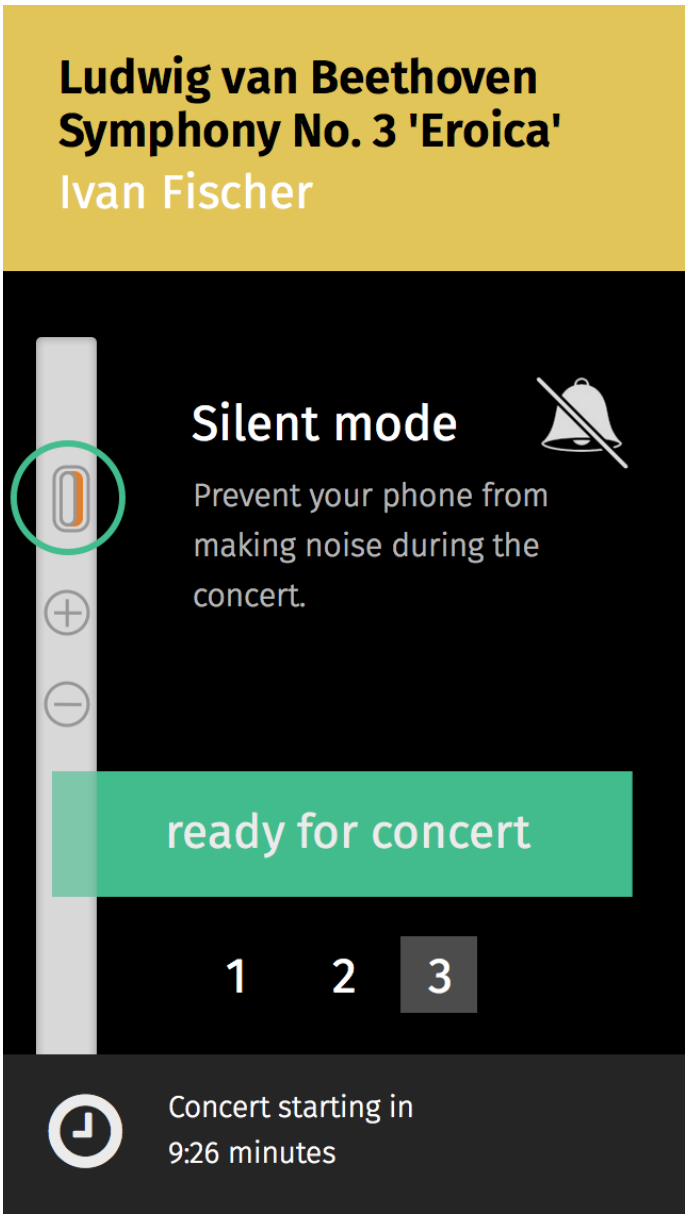
Screenshot 8.3: Already logged in



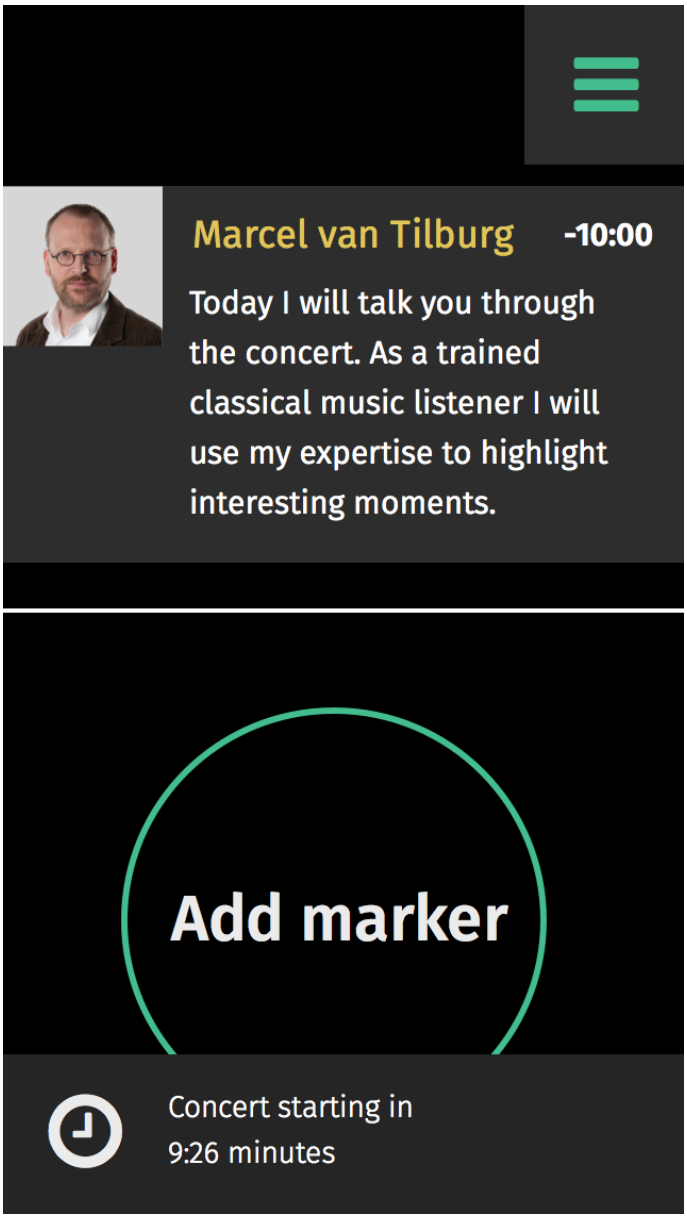
Screenshot 8.4: Audio comments



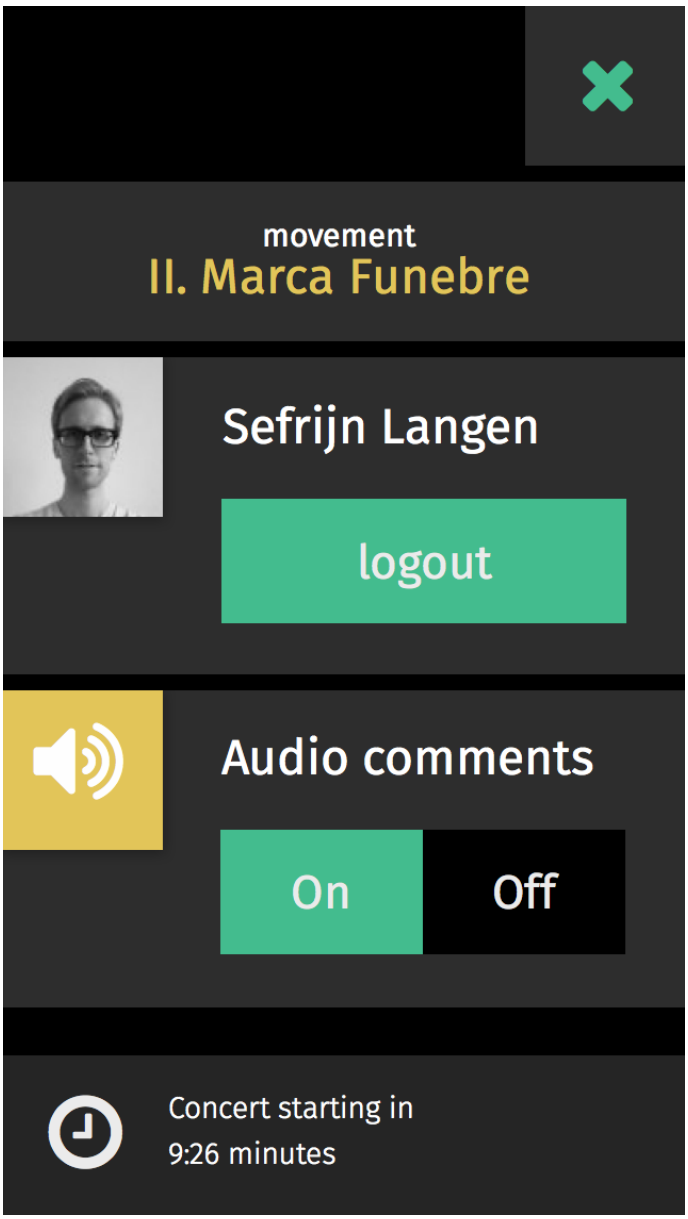
Screenshot 8.5: Headphones



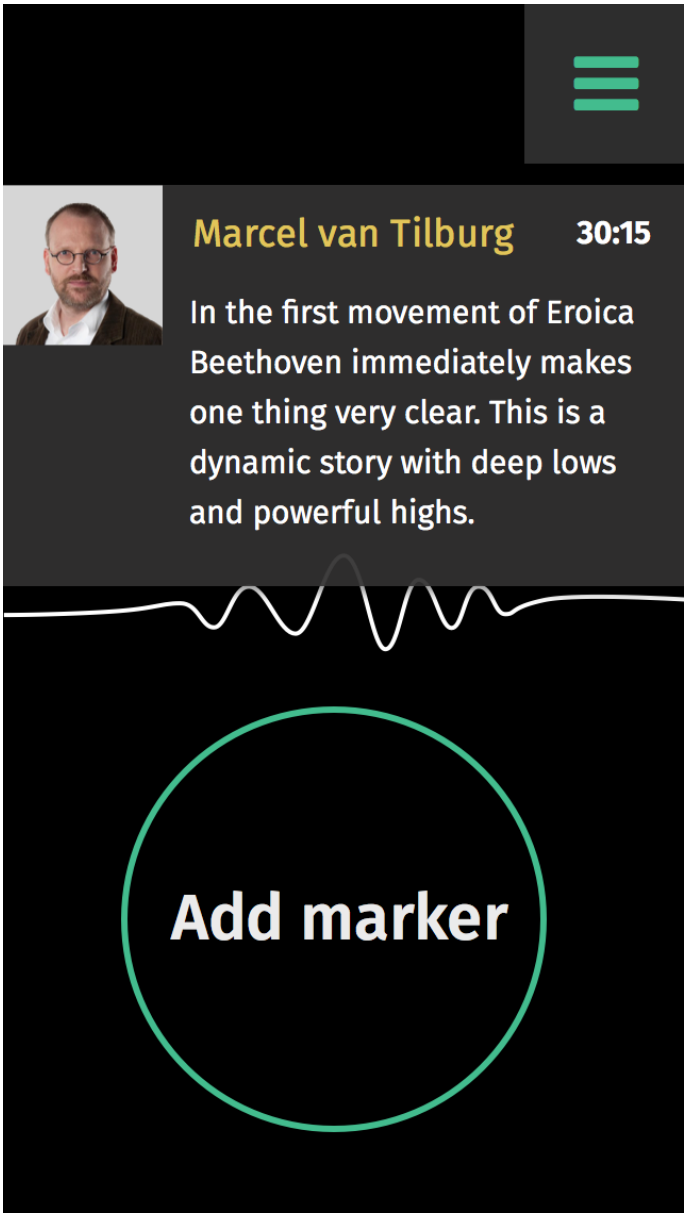
Screenshot 8.6: Silent mode



Screenshot 8.7: Pre concert marker

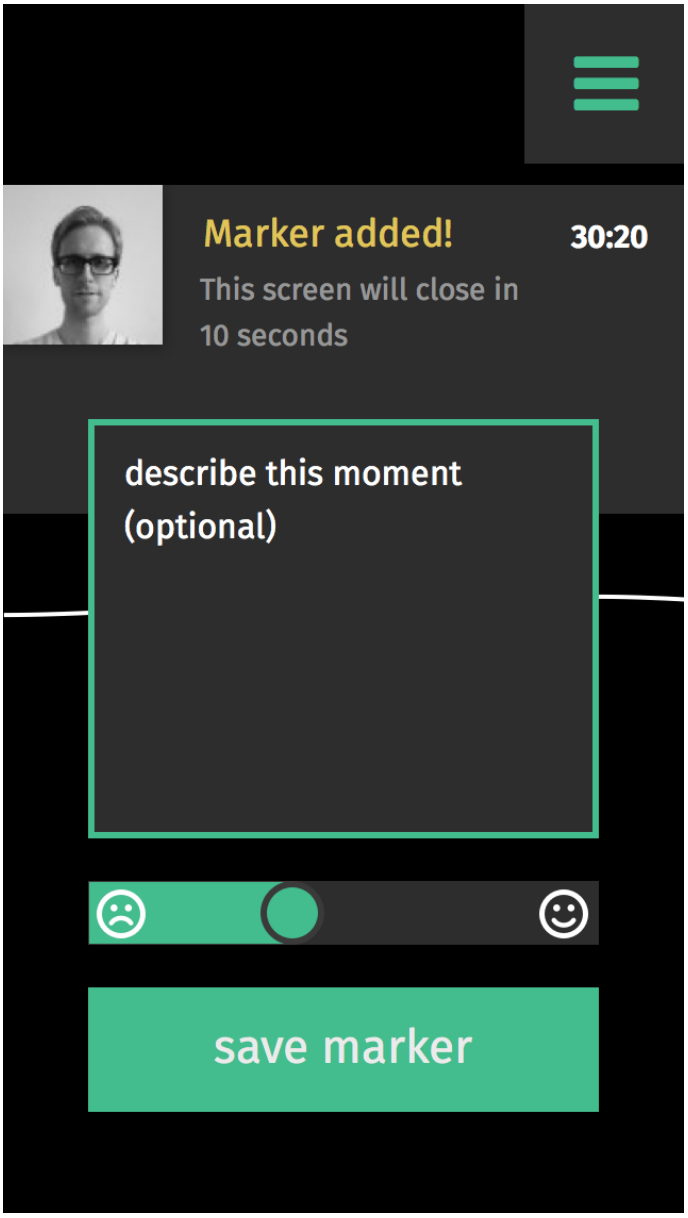


Screenshot 8.8: Menu with marker settings



Screenshot 8.9: Marker during concert (without 'Concert starting in x:xx minutes')

Screenshot 8.10: New part/movement of the work starts



Screenshot 8.11: Add new marker