

Formative Evaluation

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In collaboration with TekLab & Volda University College, our team evaluated the working of Hidden. This evaluation will trace out the existing issues in the product and map out solutions based upon three criteria –

- User interface Does the user understand the interface?
- Pedagogical functionalities What kind of content are shown and how well does it communicate?
- Appeal; Technical and normative appeal What kind of functions/features would improve the appeal. Gamification, participatory elements etc.



User Interface

User interface is very easy to understand in general, and is easy to navigate in, but lacks the complexity for more experience users who would, for example, want to change more settings, make their own waypoints in the map, or just make their own story ways, which they can follow through a set of waypoints.

Overall, the UI looks modern and clear, but we would like to see some changes in maps functionality. For example, when user wants to navigate to a place, he has to use some other map (Google maps).

In the UI, there can also be pictures added in combination to the text of the places, and not just a text itself, which would help with navigation and understanding what you should be looking at when you arrive at a place. Although there is a "Change language" option, most of the UI and text are not being translated into English at all. That is very impractical for foreign speaking visitors who happen to use the app while staying in Norway, because they have to rely on translator, but since you cannot translate directly in the app and you cannot even paste the text from the app to the translator.





Another thing concerning map markers is, how these markers get updated. When you go to the point, the marker no longer exists and there should be option to report this, or at least edit information. Ability to add markers by players would also be really nice, as it would gamify the experience and user will feel like he can actually contribute to the world and be a part of the whole experience.

For the **user interface**, we used the severity rating scale from Nielsen Norman group for identifying critical elements in the interface of the app.

Problem	Rating
Language is stuck to Norwegian even if selected as English	1
Content is only text; can include images	3
Past activity cannot be saved because there is no account	2
Sharing not available for social media	2
Lack of Navigation and Directions	3
No option of text to voice	3
No option to change the look of the map	3

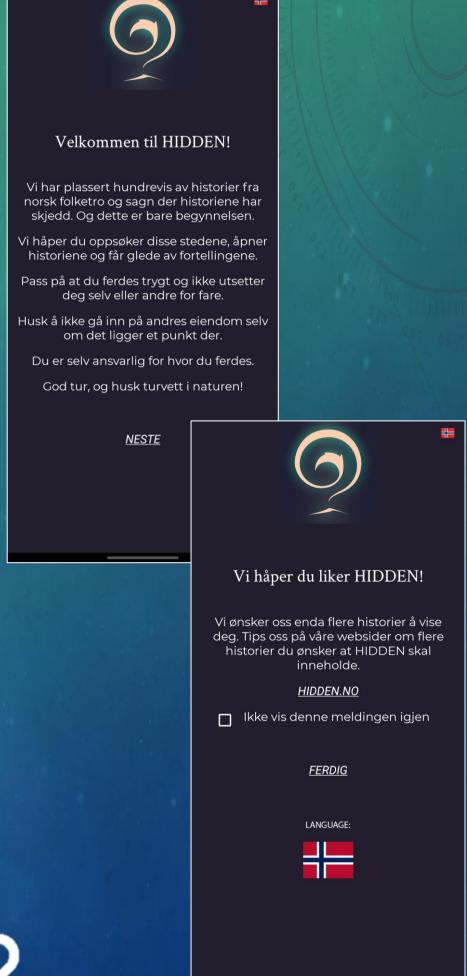


Pedagogical functionalities

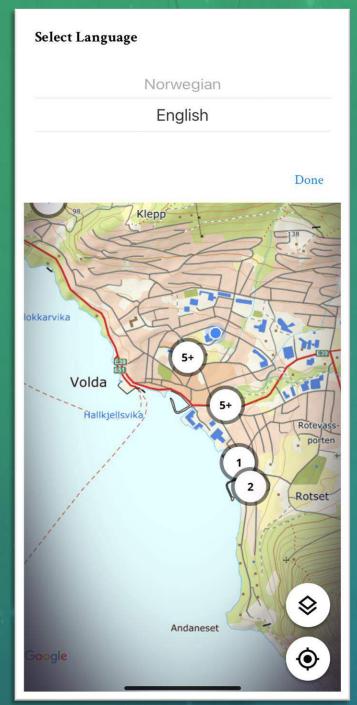
As soon as you log into the app, you are greeted with a screen that asks you for permissions for storage and camera, for the app to function properly. That's normal nowadays and provide user with a feeling of security, so that he can trust the app will not access this when it is not active and when user doesn't want it.

Then there is written text on the interface, but in Norwegian only, which foreigners (as mentioned before) can't really understand, so for them it has no meaning, and they just skip it completely. Then you are thrown into map itself — with no tutorial or explanation whatsoever, so you must figure everything out by yourself. Luckily for "unexperienced" users, there is not a lot of options, so one can figure out how app works, pretty quickly.

Unlucky for more experienced users, there aren't almost any settings at all, as stated previously in the text, and we will dive more in depth into the solution in second part of the evaluation. But in general, the content shown in the Hidden app is informative, entertaining, and can as well be educative.







After a few days of using the app, we found a very tiny button to change the language of the main screen with description into English. It was so small, that it can't be noticed for the first few times of using the app. So, we can imagine many other people might miss it too. It would be nice to make the button a lot bigger, or maybe more visible, so anyone can find it easily on the small screen of the mobile phone.

User can learn something new while being immersed in an AR experience and the environment around him by going onto the points and exploring. This element makes discovering hidden new places fun for ordinary users, but lack of any other customisation, leader board, user profile and other things usually found in other aps of similar category (namely for example "Pokémon GO") makes it less attractive for younger userbase.

Texts in the map part of the app are also informative and entertaining, but main issue is they are in Norwegian, as previously said, so using it for foreigners becomes really complicated and thus negotiates effect that creators wanted to make with the texts.

Volda kyrkjestad



HALLKJELLSVIK (VOLDA) ST. OLAV. anr. 19 Hallkjellsvik (Volda sogn). Eldste omtale av kirken er i 1432 (Halkelsuiks kirkio, AB 136), men prestegård er nevnt i 1338 (Oeyrum prestgarðenom j Valld, DN V:124). Den eldste kjente kirken på (gnr. 19) Hallkjelsvik var en stavkirke. Skipet var trolig 35x16 alen, koret 8x11 alen. En gang på 1500-tallet skal det ha blitt bygd til et tverrskip på stavkirken mot sør ("Storkirken"), og i 1551 ble materialene fra et da revet korshus på (160) Ulvestad i Dalsfjord benyttet til et tverrskip mot nord ("Nykirken"). På 1820-tallet ble kirken utvidet med et galleri, men uansett var kirken for liten og den ble delvis revet i 1858. Koret og sakristiet ble stående som interimskirke. Nykirken sto ferdig samme året, en tømmerbygning med korsformet grunnplan og våpenhus med tårn i vest. Kirken brant i 1929, og bedehuset ble benyttet fram til nåværende steinkirke sto ferdig i 1932. Stavkirken sto "litt lenger nede på kyrkjegarden enn dei to seinare kyrkjene. 'Nyekyrkja' nådde gjerne så langt opp som til muren nedanfor sakrestitrappa no" (Ørstavik 1973, 1982). Steinkirken ble tillatt reist "på den tidligere kirketomt", og det ser i dette tilfellet ut til å menes bygningstuft og ikke kirkegård. Dedikasjonen er etter DN VII:563 (1523). 2. juli 1433 var erkebiskop Aslak Bolt i visitas på Hallkjellsvik (DN V:632). Ved visitas på 1430-tallet skulle biskopen ha i Halkelswik iij næter (AB 190). I 1589 var Volda hovedkirke med annekser i Ørsta,





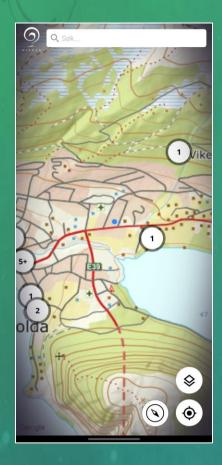


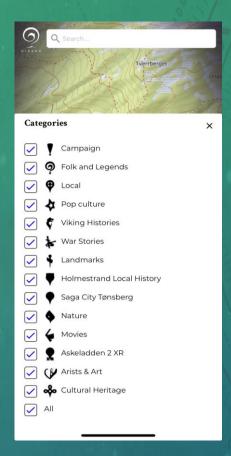
Appeal

Graphics of the app and interface are appear attractive and colourful, and they fit the theme well. Although some changes to the look could be introduced in order to appeal more to younger generations. Younger people often like more polished, stylish and clean design languages with colourful palettes.

- Time spent: The app looks very gamified and therefore addition of elements that increases the possibility of spending more time on the app seems essential. Since, the app only offers a map with locations that describe the place in text, there is no further step that can be taken within the app.
- Public connection: The opening screen of the app offers to change the language of the text to suit the user. But since most of the information is in Norwegian, establishing a connection with the user becomes a harder.
- Normative Pressure: Being a standalone app without any social media or sharing functionality, there is no reason the user to be pressured into using the app therefore it also makes the experience of the app hassle free.







- Participatory Potential: Hidden lacks any kind of sharing ability. Marking a location on the app and then sharing it with friends to explore is not possible at the moment. Users can also not leave comments or share their experiences using the app as there is no comment or feedback section in the app.
- Price: Hidden is free to use and therefore is very accessible to all types of users.
- Technological Appeal: The app is fairly easy to use with clickable points on the app. Any
 user with an experience of using a smartphone can explore around the app very easily.
 The overall experience of the app is pretty straightforward which adds to accessibility of
 the app.
- Situation Fit: Since, the app only has map-based functionality at the moment, it can be used while using a smartphone just like accessing any other map-based application. The integration of Hidden AR and scanning the QR codes at certain locations will introduce a new dimension the functioning of app and therefore would be more fun to use the app outdoors.



Solutions

The solutions for the problems mentioned above can be initiated by the addition of certain elements within the app like introduction of more **graphics** in the information about location like **pictures**, **videos** etc.

The integration of the Hidden AR with the map will result in a massive growth of the functioning of the app, offering users to interact with the map and look at various information through the smart phones instead of reading the texts.

The **navigation through the maps** is also a necessary element to be added in the app. The map is stuck on North-Top orientation and allowing it to rotate will greatly increase the functionality of the app. Additionally, the introduction of navigation and directions to reach specific location on the map will allow users to access the app without any kind of hassle of switching apps.

While **changing the language of app**, introducing more options other than English and Norwegian would increase the international audience of the app and therefore can be introduced outside Norway as well in the future.







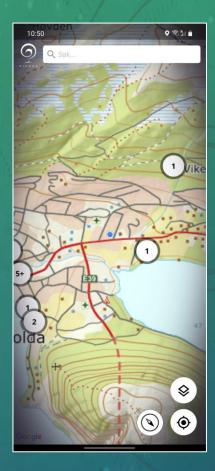
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Text to Speech



Compass

Along with the language, an option of **text-to-voice** will also help users to listen to the text while experiencing the location without looking at their phone.

One of the most crucial elements can be **activation of AR or voice by Geo-location** and not just the map or the scanning the QR-code. If a user can listen to the information about the location by just being within a specific radius of the location without accessing their phone, the heads-down phenomenon can be tackled pretty well.

User should also be allowed to login to the app by **creating an account** so they can access their past activity. This can also allow users to share their views of a certain location on the app with an interface that is similar to **social media**. This can increase an amount of gratification a user experiences when visiting a location and marking it on their map.

Leaving feedbacks for a location can also be rewarded with points that can be used for any other purpose that can be shared with their friends. This will motivate people to explore the app and locations more.



Anti-free passenger paragraph

Marek Hofman wrote first and second part of the evaluation. That includes User interface and Pedagogical functionalities. He also did some graphics editing on the screenshots he took in the terrain. Mohit Pandey did third part of the evaluation text, part of the solution and graphic design of the evaluation. Rakin did part of the solution and also helped with screenshots and graphics.

