

# ERHVERSAKADEMI AARHUS

MULTIMEDIADESIGN

1md15Digi

05/10 - 2016

## Project Clearchannel

### CULTURE EXPLORER

[project3o1.wdmorarmihai.com/](http://project3o1.wdmorarmihai.com/)

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# 1. INTRODUCTION

In this project we were told to come up with an idea, that would create value for ClearChannel[page 11]. Clearchannel is a big advertising company who specialises in selling adspace on outdoor physical billboards as well as outdoor digital screens.

We have in this project chosen to work with tourism in Aarhus in 2017, due to Aarhus being the european capital of culture in 2017[page 11]. Making a project with focus on tourists makes sense as ClearChannel can collaborate with Aarhus kommune for promoting their attractions.

## 2. PROBLEM STATEMENT

Clearchannel is in a very competitive market, and they have focused a lot on outdoor advertising. To gain an edge over their competitors Clearchannel needs to stay innovative and create new ways to advertise.

The focus of this assignment will be to create something that Clearchannel has not already implemented, and to use the fact that Aarhus is european capital of culture in 2017 to showcase the product.

- How can we create more value for Clearchannel?
- What is the best way to implement our solution?
- How can we measure the amount of people using their ads?

## 3. THE IDEA

We want to make advertising more interactive. So that you can actually engage with the ad, and not just look at it. We want to integrate ads as a part of Aarhus as a Smart city[page 11].

### 3.1 Beacons

Our idea for ClearChannel is to boost their billboards by including a beacon in each of them. Beacons are low powered bluetooth devices that can ping a URL to phones and tablets nearby.

When you stand so close as to read a billboard, let's say you stand next to a billboard promoting ARoS museum[page 11], you get a notification on your phone asking you to accept an URL from a nearby beacon. You accept and it sends you to our webapp that we call "Culture Explorer".



Fig 3.1 -  
Beacon symbol

### 3.2 Culture Explorer

Our webapp is meant to guide you to the shown attraction as efficiently as possible. It uses Google's Maps API[page 11], to show you a detailed map with 4 different types of transport: transit, car, walking, and biking. So when you accept the URL from the ARoS[page

11] beacons billboard, you get shown a page with a bit of info of the attraction and Google Maps directions[page 11].

### 3.3 Tourism

By doing this we hope to make it a lot easier for tourists to navigate Aarhus when they are visiting. The different types of transportation also makes it easier for different types of people to choose their preferred transport method. A family of 4 could choose the car, as they figuratively would have rented a car. Maybe an elderly couple would choose public transit as walking or bicycling is too physical for them.

## 4. SWOT/TOWS [PAGE 5]

To figure out both the external and internal environment for our idea, we decided to make a SWOT, and then expand that into a TOWS. The keypoints in our idea is that directions are given in an instant, and it's easy to use. The downfall could be that people need to install an app for it to work. Beacons might not be widespread amongst the public yet, but if they do, this idea could certainly have its merits.

## 5. PERSONAS

We have made 3 different personas, to display different user scenarios. Also because ads can be targeted for a broad spectrum of demographics, different personas were needed to showcase the difference in each personas use.

### 5.1 Persona 1

Name(s): Elizabeth & Richard

Nationality: British English

Age: 58, 62 respectively

Occupation: Both retired

Relationship: Married

Hobbies: Elizabeth loves knitting, and Richard is a big war figure enthusiast.

Personality: Active couple despite their age. Loves travelling and seeing different parts of the world. They are also both fascinated by art.



Fig 5.1 - Elizabeth & Richard

#### 5.1.1 User scenario

An elderly couple from England, who are visiting Denmark for their first time. They decided on visiting Aarhus as it was promoted as the Cultural Capital of Europe 2017. When leaving their hotel (Hotel Guldsmiden) they see a huge billboard on the opposite side of the street, promoting Moesgaard Museum. In the corner they see a notification telling them to use their iphone in order to get directions to Moesgaard Museum. (Continued on [page 6])

# SWOT/ TOWS

SWOT/ TOWS	STRENGTHS:	WEAKNESSES:
	<ol style="list-style-type: none"><li>1. Fast directions(no need to type in location)</li><li>2. Easy to implement</li><li>3. Can be used everywhere there's a billboard</li><li>4. Doesn't necessarily <b>need</b> Geolocation, because the placement of the billboards are always known.</li></ol>	<ol style="list-style-type: none"><li>1. Only works for smartphones</li><li>2. Requires newest phone OS</li><li>3. Cost</li><li>4. You need internet</li><li>5. You need Bluetooth</li><li>6. Battery life (5-?? years)</li><li>7. Possible crowding of beacons (many beacons and signals)</li></ol>
OPPORTUNITIES:	SO	WO
<ol style="list-style-type: none"><li>1. More attending tourists</li><li>2. Easy to expand across the city - and other cities</li><li>3. Ad revenue, from companies who wants their attraction/shop on the map</li><li>4. The world is in a continuous evolution and there is wi-fi available almost everywhere</li></ol>	<ol style="list-style-type: none"><li>1. Because it's fast, easy and it's basically everywhere it will cater to a lot of people and it can be used by everyone in many cities</li><li>2. Billboards in places where there is free wi-fi anyways, like trainstations, busses, near cafés</li></ol>	<ol style="list-style-type: none"><li>1. The more beacons you implement, the cheaper it becomes to buy them(in bulk)</li><li>2. Sponsorship from parties interested in having their billboards up can help reduce the cost</li><li>3. Having wireless internet in most of the places will reduce the risk of consumers not having internet to access the beacons</li></ol>
THREATS:	ST	WT
<ol style="list-style-type: none"><li>1. Vandalism</li><li>2. Hacking</li><li>3. Competition</li><li>4. Technical issue with the beacon device</li></ol>	<ol style="list-style-type: none"><li>1. It can be used to raise awareness against vandalism</li><li>2. Easy implementation will give an edge over the competition</li></ol>	<ol style="list-style-type: none"><li>1. The beacon must be well hidden inside the billboard</li><li>2. Both technical issues and batterylife can be checked everytime a new poster is inserted into the billboard.</li></ol>

Fig 4.1 - SWOT and TOWS-matrix, illustrating concerns and thoughts about our idea.

Richard pulls up his phone, opens his beacon app, which he downloaded through reading the tourist brochure, and it connects to the billboards beacon. On the screen is displayed your preferred transportation way. He selects train, and they get directions on how to use Letbanen to get to Moesgaard.

## 5.2 Persona 2

Name: Bastian

Nationality: German

Age: 23

Occupation: Just finished his physical therapist bachelor

Relationship: In a relationship with a Danish girl he met while skiing in Austria.

Hobbies: Skiing

Personality: Very active. All the time looking for some interesting thing, where he can get new knowledges and implement with his lifestyle.

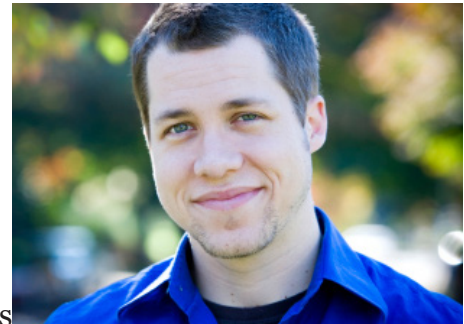


Fig 5.2 - Bastian

### 5.2.1 User scenario

Bastian is a 23 years old physical therapist from Germany. Now that he's finished university, he's looking for a job but he is not in a hurry. As in 2017 Aarhus will be the capital of Europe, he decided to take a rest and come to Aarhus. He decided to spend a bit of time in Denmark, get to know the country better, maybe he will have a future here. He is planning to bring his bike with him as that will be his means of transportation, together with his girlfriend. Usually in the mornings they bike around the city for some time then they stop at a coffee shop to have their morning coffee. There they see a billboard about the Botanisk Have. On the billboard there are also instructions on how to receive signals from the beacon, so they use them to get ready.

## 5.3 Persona 3

Name: Dan

Nationality: Danish

Age: 39

Occupation: Software engineer

Relationship: Married to Mona - 36, toothtechnician  
2 kids, Anton - 5, and Sisse - 8

Hobbies: Likes to fiddle with his raspberry pi, and always stays up to date with the most recent phone applications - including beacons.

Personality: Spontaneous, extroverted, doesn't plan ahead unless its for work



Fig 5.2 - Dan

### 5.3.1 User scenario

Dan, Mona, Anton and Sisse are visiting Aarhus during the summer holiday. They are staying at a hotel a few kilometers from Aarhus centrum. The first morning of their stay, they are about to go visit ARoS, when Dan's phone buzzes. He looks at his phone and sees a notification for Aarhus 39, a childrens literature event at DOKK1. "Whats that dad?" Sisse asks. Dan tells her, and she lights up. After learning to read, Sisse has read everything she could get her hands on. "Is this the event?" Mona says, pointing towards a busstopbillboard they just walked by. "It says the last day of the event is today".

Dan asks Sisse if she wants to go there, and checks if Anton is okay with it too. They decide to postpone ARoS to another day, and instead go see Aarhus 39 in DOKK1.

On his phone Dan pressed the "Get directions" button from the notification, and since it's to great of a distance to walk, he chooses bus and gets directions immediately.

## 6. COMMUNICATION

At this point we aim to define the target group in order to come up with the proper media presence. We are aiming for more people to use our app, and enhancing experience for those already aware about Aarhus European Capital of Culture 2017 presence. We will create a product in accordance with our research and in the best interest for the users.

### 6.1 Purpose

Our goal is to create an online web platform, which is directly linked to Google maps[page 11]. We want people to get the direction from our app, according placement nearby billboards with beacons .We want people to use more they devices as a phones to locate sightseeings of the city and other exciting places. In the event visitors could explore a lot more exhibits than they was expecting and find it interesting.

### 6.2 Sender

Culture Explorer is an web platform in cooperation with google maps[page 11] and stand for offering most exciting and beautiful places to visit.

### 6.3 Message

The app has a nice layout, formal feeling that invites you to engage and interact. In order to emphasize this and send it to the audience, we will create the website in a simple page style, so it would be easy to use and see everything clearly for everyone.

### 6.4 Target audience

Our target audience Age is approximately from 16 to 80, students, workers, freelancers, pensioner etc... From people that just cruising around, to very busy people, that don't have time to sit search for attractions, or just visiting city for a first time . Since there are people from so many different field of studies, there is also different reasons to use a Culture Explorer. Either way they all use for one common reason, fast directions. Personas, which can be found in [page 4] are created based on the data available and the qualitative interviews.



## 7. VISUAL IDENTITY

When you start to design, it is good to realize who is going to use it and why it's important. Upon receiving the assignment, we did research of other companies who are close related to our assignment. We did this in order to get inspiration and get on a right track.

### 7.1 Idea

The main idea is to make web platform for tourist to navigate in Aarhus. Using beacons we can keep it simple and give fast access for people to find a place.

### 7.2 Mood-boards[page 12, page 13]

After we did all investigations, we began to make a series of mood-boards. We have understood the necessities of the project and have incorporated those into the following images. The following mood boards have encapsulated all of these aforementioned qualities and will be vital in the finalisation of the project.

### 7.3 Colours

The basic colors that we chose is a black, white and strong blue. According to color hypothesis white is color at its most complete and pure, the color of perfection. The color meaning of white is purity, innocence, wholeness and completion. The color black represents strength, seriousness, power, and authority.

Black is a formal, elegant, and prestigious color. Authoritative and powerful, the color black can evoke strong emotions and too much black can be overwhelming.

Blue color seeks peace and tranquility and promotes physical and mental relaxation. The color blue reduces stress and creates a sense of calmness, relaxation and order. The paler the blue color, the more free we feel.

### 7.4 Typography

Montserrat [page 11] typography are used in each piece of subpage. We needed to pick something suitable for the context of the app. We used Montserrat font, which is not regular. They are used most often for fancy text components. However, we decided to use in short paragraphs and descriptions.

Building mock-ups in Invision App[page 11], we kept the same typography. The typography of the logo we made as a single Montserrat bold font what gives clear view and allows to stand alone and represent itself.

### 7.4 Wireframe

We began to portray the wireframes[page 15] and did a few subjective meetings about them where we requested people do some test to check or stream is clear. At that point we let them pick one of two options.

From the results we gathered, we choose best option. Then we made the drawing on Photoshop to emphasise the image.

### 7.5 Mock-up



From wireframes we did a mock-up [bilag]. We realized that it needed a logo on the top left side. There was a huge space which could have been used. After referencing the moodboard we implemented the simple style what we was designing. At that point we choose to utilize black shading around header segment to have sporadic perspective, coordinating the picked textual style shade of typography.

## 8. MAKING THE PROTOTYPE

When finishing the mockups we decided on making an actual prototype, even though it was not a requirement for the assignment. We started out by deciding which parts we wanted to focus on due to time restrictions. This includes: a working framework with linking to subpages, backend javascript and inclusion of Google maps API [page 11]. We also wanted to have a MySQL database [page 11], but unfortunately we didn't have the time to implement it.

### 8.1 Database

MySQL was meant to serve as the statistic part of the webapp, so every time someone loaded up the webapp in one of the subpages (fx. ARoS) the database would update a table with increments of 1. That way it would be possible to see which billboards had the most/least views through the beacon connecting.

### 8.2 Google Maps API

A big portion of our prototype is made using the documentation that you see on google's website[page 11]. We have implemented it so the map doesn't show in an external app or webapp, it actually shows inside our prototype. This means we have a lot of power to customize the map to our liking. For example we changed the different parts of the map to be different colors from standard. We wanted it to have a more cultural feel of Aarhus city, so the colors got warmer and more like autumn. We managed to hook into the API and have the estimated time of arrival show up alongside the icon showing fx the bus.

### 8.3 Frontend

For the frontend part of the coding we used basic html and css. We used a bit of bootstrap to help us kick things off with responsiveness.

The Html markup is simple with <div> tags to set up the structure of the document. We used <article> tags for portions of the page that contains text, in which we included <h2>, <h3> and <p> tags, depending on what kind of text we needed. To set up navigations of the pages we used <nav> tags with list items inside unordered lists. Our webapp is split in 2 parts. First part contains the main page with pictures of the attractions it presents and their names (this webpage will be used mostly if people want to access the page directly and not through a beacon) The second part of the webapp is the attractions themselves. We split the html in 4 folders (4 attractions at the moment) and in each folder there is the appropriate info/directions for that attraction (If you connect through a beacon, you will get directly to the page with the attraction and skip the 1st part of the webapp).

Page styling was done using css and its properties. There are 2 css files, mapstyle.css is for styling of the google api maps while the style.css is for styling of all the other containers on the pages.

## 9. CONCLUSION

This project has been eyeopening in terms of possibilities in advertisement. We believe beacons can have a big impact on outdoor advertising, but they just need to be more widespread amongst the public. The idea that we had could be a gateway for the public, to experience beacons and learn how to use them.

The best way to implement our solution would therefore be with beacons, as they have great potential for future use. Together with the beacon we decided on using a web based app, as they are supported by different devices, and doesn't require a user to download an app.

Clear Channel has had problems with interactive ads earlier, where they have tried using NFC on posters, but that didn't get the result they wanted, because people didn't want to walk all the way up to the poster and put their phone on it, to engage with the ad.

Beacons solve this problem by not having to walk up to the ad and physically scan the poster, instead you can stand comfortably in your own spot and just accept the URL emitted from the beacon. By implementing it this way, we believe we create a lot of value for Clear Channel, as it solves the problem of people having to walk up to the poster to engage with it. Furthermore we can monitor each and every time a person interacts with a beacon, so Clear Channel can see which ad positions and/or which type of ads generate clicks.

Right now Clear Channel doesn't have a way to monitor how many people watch their ads, and which positions are best. If they have that information, they can charge more for certain ad spaces, and figure out which type of ads works best on the public.

Our idea has many benefits, but also some pitfalls, but we believe it can have great influence on the future of outdoor advertisement.

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11. APPENDIX



Fig 11.1 - Moodboard





## 11. APPENDIX



Fig 11.3 - Montserrat font

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Fig 11.4 - Wireframe, landingpage



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Fig 11.5 - Wireframe, choose transportation method page

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Fig 11.6 - Wireframe, map page

## 11. APPENDIX

### GROUP CONTRACT - PROJECT CLEAR CHANNEL

#### ATTENDANCE

We have in the group agreed to meet everyday at 9, and gonna work till we feel like we're finished.

Keep in contact with the rest of your group if you are hindered or unable to attend groupwork. (Use facebook chat)

Be strict with deadlines, don't be afraid to work extra from home during the late part of the process.

Be on time, if not:

**1kr** per minute is donated to the **"coffee pot"**  
- maximum of **20kr**.

Once the coffee pot can buy 4 cups, the group can decide to cashout

#### HOMEWORK

Be sure to ask for help if you are stuck (swallow your pride)  
Make sure to finish your homework on time

#### WORK PLACE

First guy to get to the school, writes location in the chat.  
Prefered workplaces:

Cubicles  
Hanging glass cages

This contract is made between the following students of Digital Development programme:

Mihai Silviu Morar,  
Leo Yada Karsbaek,  
Kasper M. Wyrzt Hansen  
and Algirdas Luksas.

Failure to comply with the group contract will result in a meeting with the teachers and additional measures will be taken.

Fig 11.7 - Group contract