WhatsOn

Eoin Fitzsimons

Conor Judge
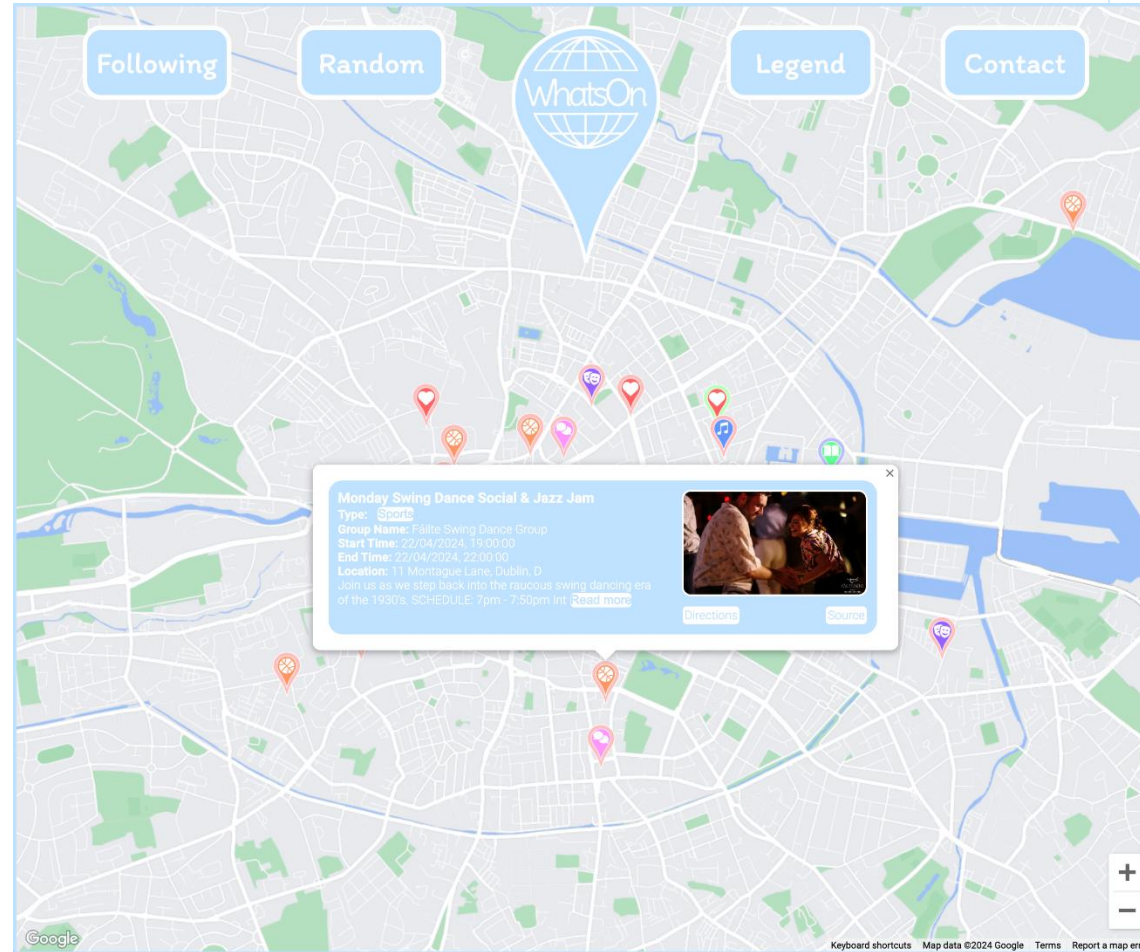
David O'Connor

Application Idea

Application Idea

WhatsOn

- Map-based

- Event discovery web application

- Explore nearby events

- View event details

- Help decide which events to attend

- Emphasizes simplicity, spontaneity, ease of use

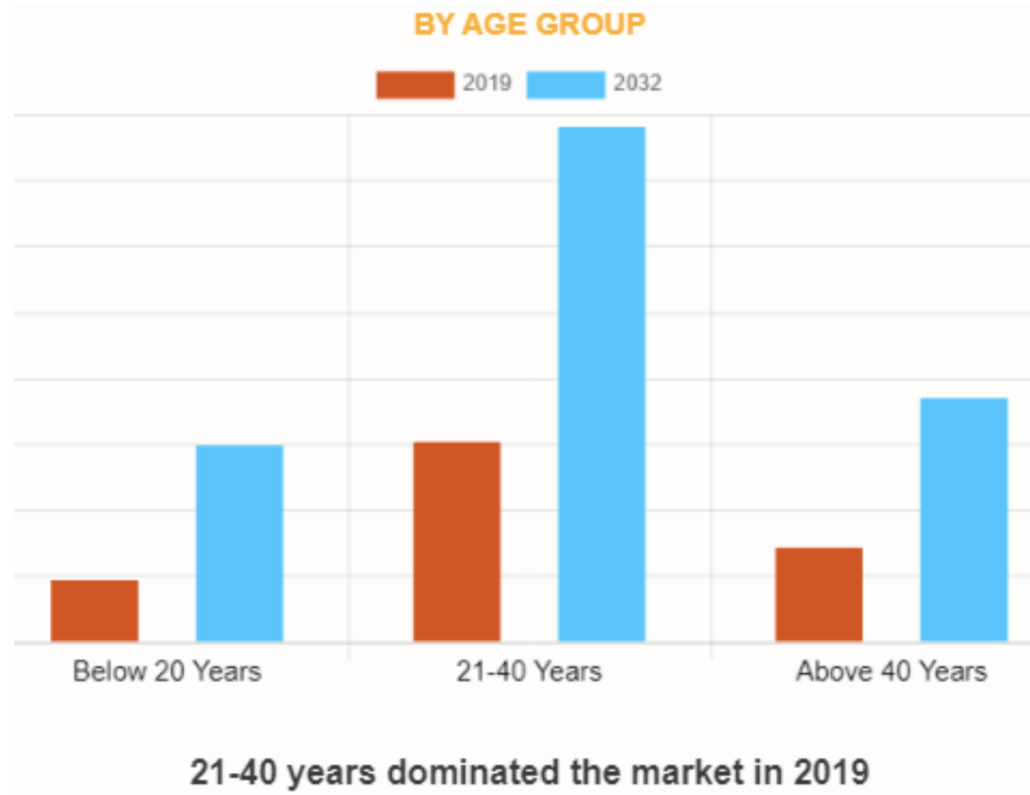# Target Audience

Target Audience

Users

- Adults aged 21-40 living in urban areas

- 21-40-year-old segment dominated the global events industry as of 2022

- Is expected to maintain this in the future

BY AGE GROUP

2019   2032

Below 20 Years | 21-40 Years | Above 40 Years

21-40 years dominated the market in 2019

Allied Market Research, 2023

Target Audience

Users

- Foreign nationals and tourists

- Recent demographic changes within Dublin have created greater demand for communal and networking activities such as events

- Average age of an immigrant to Ireland is 36 years old and thus falls within the range of the most dominant market for events. (European Migration Network, 2023)

Target Audience

Users

Value Proposition

▶ Explore nearby events

▶ Simplifies decision making

▶ Promotes spontaneous socializing

Business Goal

▶ User Engagement

▶ Event Attendance

Target Audience

Buyers

- Event Industry

- The global events industry market was valued at $1.1 trillion in 2019

- Projected to reach $2.1 trillion by 2032

- Growing at a CAGR of 6.4% from 2023 to 2032. (Allied Market Research, 2023)

Target Audience

Buyers

Value Proposition

- Increase event visibility

- Increase event ticket sales

- Save advertising money

Business Goal

- Commission from event click throughs

- Paid inclusion of events

How it's innovative?

Differentiation

Real-Time Event Discovery

- Our research indicates that there is a gap in the market for a strictly event discovery application

- WhatsOn is singularly focused on event discovery instead of hosting, management, etc

- Only features Real-Time Events

- Dynamically appear on the map when they are within 24-hours of starting

- This approach encourages engagement by only showing what users can currently do now

Differentiation

Map-Based User Interface

- Other apps employ a traditional list format with layers of pages and planning expected of the user, usually including signing up for an account

- WhatsOn uses a single, uncluttered and consistent design with events appearing directly on the map itself with only the location permission of the user required

- We believe seeing events on a map makes people realise how accessible and local they are to you, instead of a time and date with an address on a website

Differentiation

Spontaneity

- A core competency of WhatsOn is our emphasis on breaking through indecision

- One feature that addresses this directly is the Random event feature

- If a user can't decide on what to pick, the random button will present an event for them each time it is pressed

- This has a slot machine characteristic of the most popular social media sites such as Snapchat, TikTok and Instagram

Technologies Used

Technologies used

Frontend

- HTML
- CSS
- JavaScript
- EJS

API Integration

- Google Maps API
- Maps JavaScript API
- Google Cloud Console

Backend

- Node.js
- Morgan
- Bcrypt
- Crypto
- Jquery
- Axios
- Cheerio
- Fs

Version Control

- Github

IDE

- Visual Studio Code

Graphic Design

- PhotoPea
- PixelMator Pro

Who Did What?

Who Did What?

Eoin

- ▶ Visuals - Designed the general style of the app and its logos. Prevented contact from opening another website as confirmation

- ▶ Event Data - Created the web crawler and categorised events

- ▶ Privacy - Encoded the Map API key so it isn't visible to the public

- ▶ Modals – Created the functionality of the buttons, how they slide down and switch modes

Who Did What?

Conor

- Product Owner - Clarifying project purpose, deliverables, deadlines, documentation and video

- Map - Designed Map and Info Window Content and Styling

- Event Data Manipulation - Created function to dynamically create event markers and info windows by location, type and time

- Event functionality - Created general Event functionality such as Random, Filter, Directions, Source, etc

Who Did What?

David

- Backend Navigation – Ensures users would go to the correct URLs or a 404 error page if they land on a page that doesn't exist

- Account Creation – Saves users' information so they can log back into their account and pick up where they left off

- Account Security – Encoded user passwords so if anyone were to access the user accounts they couldn't get password information

- Contact – Used Formspree to allow users to send emails to our account

Challenges Faced and How They Were Overcome

Challenge

Meetup API

▶ Deployment for API key

▶ 30 minute token expiration

▶ Required User to have meetup account and log in

▶ Needed authorization permissions

Invalid Authorization request

If you were directed here by another application, contact its developer

---

Log in

Not a member yet? Sign up

Email

Password   Forgot password

☑ Keep me signed in

Log in

Connect with Application

Authorize Davey to use your account?

This application will be able to
- access your basic Meetup information

Allow   No, thanks

You can revoke the application's access to your account at any time from your account settings.

Solution

Webcrawler

▶ Axios import Meetup data

▶ Cheerio to parse data

▶ FS to print to JSON

```javascript
import axios from "axios";
import cheerio from "cheerio";
import fs from "fs";

const categories = {
  Charity: ["511", "604", "624", "673", "449"],
  Cultural: ["521", "622", "467"],
  Education: ["405", "593", "436", "546"],
  Entertainment: ["612", "535", "395"],
  Social: ["571", "652", "701"],
  Sports: ["482", "612", "684"],
};

async function fetchData() {
  let eventsData = [];

  for (let eventType in categories) {
    for (let categoryId of categories[eventType]) {
      const main_url =
        "https://www.meetup.com/find/?sortField=DATET
        categoryId;

      let eventDetails = "";
```

```json
{
  "groupName": "Dublin Buddhist Centre",
  "eventTime": "2024-04-15T07:30:00+01:00",
  "eventDetails": "These events are suitable for those who already have a reg
  "lat": 53.351986,
  "lon": -6.253541,
  "locationInfo": "James Joyce Street, Dublin, D",
  "eventName": "Drop In Morning Meditation (In person and Online)",
  "eventEndTime": "2024-04-15T08:25:00+01:00",
  "eventImage": "https://secure.meetupstatic.com/photos/event/7/d/5/5/600_515
  "eventType": "Charity",
  "eventUrl": "https://www.meetup.com/dublin-buddhist-centre-sangha-nights/ev
  "groupLink": "https://www.meetup.com/dublin-buddhist-centre-sangha-nights/"
},
```

Challenge

Google Maps API Key Security

- Must not be viewable in a public repository
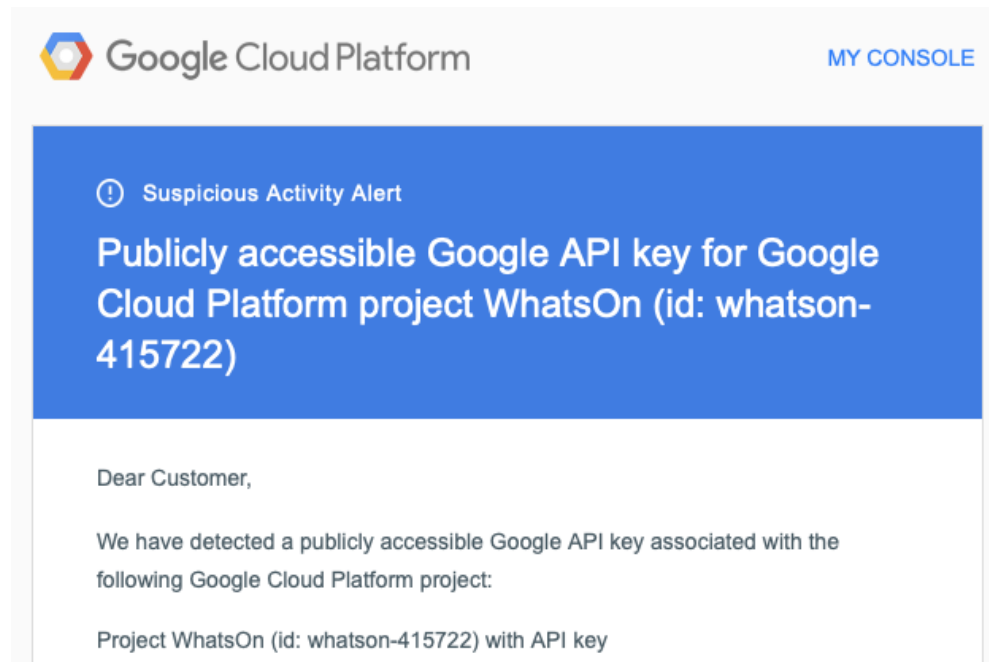
Solution

Google Maps API Key Security

▶ Encoding the key

```javascript
//this is used to create a session
function decrypt(encryptedApiKey, secretKey) {
  //this is used to buffer the key
  const key = Buffer.from(secretKey, "hex");
  //this is used to create a decipher
  const decipher = crypto.createDecipheriv(algorithm, key, Buffer.alloc(16));
  //this is used to decrypt the api key
  const decrypted = Buffer.concat([
    //this is used to update the api key
    decipher.update(Buffer.from(encryptedApiKey, "hex")),
    //this is used to finalize the api key
    decipher.final(),
  ]);
  //this is used to return the decrypted api key
  return decrypted.toString();
}
```

```javascript
// Function to load the Google Maps API
function loadGoogleMaps(apiKey) {
  // Create a new script element
  const script = document.createElement("script");
  // Set the source of the script to the Google Maps API
  // Include the API key and the callback function
  script.src = `https://maps.googleapis.com/maps/api/js?key=${apiKey}
  // Set the script to async
  script.async = true;
  // Append the script to the body of the document
  document.body.appendChild(script);
}
```

Conclusion

Conclusion

▶ We believe WhatsOn has great potential for success because of our unique approach to capitalise on current and future trends in the events industry

▶ Target customer vision permeates the entire application, from colour scheme, design and features

▶ We remove the friction and planning involved in just getting out there and being social

▶ Other applications feel like homework by comparison and create further obstacles to spontaneous socialising

▶ With us, there is no homework, no planning, no stress, just WhatsOn.

Bibliography

Bibliography

▶ Allied Market Research (2023) Available at:

https://www.alliedmarketresearch.com/events-industry-market

(Accessed: 1 February 2024).

▶ European Migration Network (2023) Available at:

https://emn.ie/one-in-ten-of-the-population-are-non-irish-citizens-census-2022-figures-show/

(Accessed: 1 February 2024).