## Topic of research

This research will cover Eventbrite and the API it provides.

## Purpose of research

The purpose of this research is to learn and document how the Eventbrite API works and cover the way it can be implemented into android studio.

## Carried out by

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## What is Eventbrite?

Eventbrite is an event service from which people can view set and track events. You do not have to be signed up to use the service, however you do need to be a member to create events. These events can be viewed by anyone, furthermore you can register your interest in an event for the creator to see.

## How will this effect IWIC?

Eventbrite is already used by IWIC to track their events, this means that they can easily share event details such as location, date and time of the event. However, people would have to search IWIC’s events to see them, incorporating the API into an android application would allow us to send the user notifications directly to their phone each time an event is created by IWIC.

## How does the API work?

Just like most other APIs the purpose of them is to allow access to remote data through third party interfaces, Eventbrite’s API allows our android application to have access to all the events currently listed using the Eventbrite platform.

We can use this to our advantage by notifying our users about events happening relating to IWIC.

Direct notifications means there is no need for users to search Eventbrite for IWICs events as they will receive them automatically.

Furthermore, the API has the potential to allow users to notify IWIC if they wish to attend.

## Implementation

The implementation stage would require us to use the klaxon library within android studio. This library allows the use of APIS with kotlin support. Klaxon is a JSON parser for kotlin meaning that it supports the act of sending data over using the kotlin language.

Get requests are sent by the application to fetch data which meet a set of parameters, for example within Eventbrite you can sort events by location, creator, date or purpose.

The potential issues that we will encounter include sorting the events, for example we could sort them by locations but then people wouldn’t get notifications for events outside of IWIC. This is something we will need to consider when we implement this API.

## Timing

When pushing notifications to the mobile device we would need to consider when to push notifications to users, for example we could push every morning, however some people would just clear notifications in the morning, or we could push when the event is created but that requires background processing.

## Development process

The first stage of using this API would be to get an API key from the development section on Eventbrite’s API Documentation. This authenticates the application to access the API.

The next stage would be to use a get request using the provided API key and number of conditions for the search. This would return a JSON file which is basically a list of objects. Each with the same attributes.

You could then use the list of objects to create several classes built around the attributed of the lost of objects. This could be done using a for loop. for example, for each object in list events we would create a new container for the event as set all the attributes equivalent to the current event.

## Summary of research

In conclusion there are many benefits to using the API however there are still some final decisions which need to be made as a team for example timing and the best way to sort the events.