



BirdCatcher

White Paper

Team Bravo

Ryan Taylor (Team Leader), Robin Graf, Wai Kai Wu

Jack Nicol & Michael Graver

Contents

<u>INTRODUCTION</u>	<u>2</u>
<u>PROBLEM</u>	<u>2</u>
<u>SOLUTION</u>	<u>3</u>
<u>KEY FEATURES</u>	<u>4</u>
<u>COMMERCIALISATION</u>	<u>5</u>
<u>MARKETING</u>	<u>6</u>
<u>OVERVIEW</u>	<u>7</u>
<u>HOW OUR SYSTEM WORKS</u>	<u>7</u>
<u>OUR SYSTEM REQUIREMENTS</u>	<u>7</u>
<u>TWITTER STREAM</u>	<u>7</u>
<u>JSON LOGIC</u>	<u>8</u>
<u>DISPLAY</u>	<u>8</u>
<u>PROTOTYPE TO PRODUCT</u>	<u>9</u>
<u>PRODUCT EVOLUTION</u>	<u>9</u>
<u>VISUALISATION OF TWEETS ON OPEN MAPS</u>	<u>10</u>
<u>INCREASED SCOPE</u>	<u>10</u>
<u>BIRDCATCHER WIDGET</u>	<u>10</u>
<u>ACCESSIBILITY</u>	<u>10</u>

Vision

Introduction

BirdCatcher is a comprehensive social media management application.

BirdCatcher gives companies more opportunity to interact with their customers in an exclusive environment. Account holders will be able to personalise the content displayed. The benefit, giving companies more options than ever to customise their social media presence. Reaching people who don't have access to social media platforms.



Problem

Social Media. A seemingly infinite resource of useful information such as; opinion, corporate advertising and current affairs. This information is valuable to corporations and sociologists as it allows them to analyse the trends of a certain demographic or geographic. It is also useful to consumers (the public), as it allows them to keep up to date with current affairs and the latest products or events. Unfortunately, this information is somewhat obfuscated by the large amount of useless data on platforms such as twitter. If only there was a way to refine this information, and therefore provide useful data to those who require it.

Solution







BirdCatcher is that solution and is easy to implement as part of your website. BirdCatcher knows how to find tweets based on some search conditions such as;

- Twitter Handles i.e. @BirdCatcherTest
- Hashtags i.e. #BirdCatcherTest

Telling BirdCatcher how to get these tweets is a simple and pain free. Once the account holder is logged in, they will be able to define the search parameters. BirdCatcher will then ask twitter for those tweets and display them on your webpage. BirdCatcher will also remember the tweet so it can display tweets it has previously caught, even when twitter is down.

BirdCatcher also comes with extra functionalities which allow the account holder to delete tweets that you accidentally told the BirdCatcher to find. You can also blacklist phrases so that BirdCatcher won't display inappropriate tweets on your steam.

Birdcatcher

 <p>Digital Health Maven Podcast Short: Daniel Kraft on How to Practice Human-Centered Innovation - https://t.co/Aomtj0tbUr #GoogleAlerts</p>	 <p>A Framework to Incorporate mHealth, Wearables in Clinical Trials - https://t.co/saVbaiS9jX #GoogleAlerts</p>	 <p>tremendous opportunity to incorporate fitness trackers into clinical practice https://t.co/G5AeLGPbw0</p>
 <p>Our @RJ_Hollick was talking about mobile bone density screening at #scimp2016 yesterday #hsrunews https://t.co/rg8IzTMpTw</p>	 <p>RT @EntwistleV: "If you over-rely on quantitative data you miss the story. And if you miss the story, you miss the people." Applies beyond...</p>	 <p>RT @hildabast: @HealthEvidence @IDEALCollab Statistical significance does not mean differences are not due to chance https://t.co/GHtiT7IOxr</p>

Key Features

BirdCatcher has many great features which makes it beneficial to both companies and customers.

The main features that BirdCatcher comprises of:

- Can be quickly integrated into any existing Django website
- Simple content management
- No user registration required
- Friendly and easy to navigate interface with responsive loading
- Data stored on a database

Easy Integration

The Django framework consists of multiple apps per project, this makes integration with other Django websites simple because the process only consists of importing the BirdCatcher app and installing its dependencies. Saving you valuable time.

Content management

Changing the content displayed on your BirdCatcher web page is a simple process. All the admin has to do is change the parameters sent to the Twitter API and BirdCatcher will change the display instantly.

No registration required

Anyone will be able to view a company's content without having to register for an account. Not requiring users to register will mean that more people will always have free and easy access to the content. Increasing your social media footprint.

Interface Navigation

Navigation of the BirdCatcher interface is simple and responsive with incremental loading, eloquent layouts and interactive content. Which can only add style to your website.

Data stored on a Database

The tweets collected from the Twitter API are then stored in a database. This means that the stored tweets will be displayed on your BirdCatcher page even when twitter is down. Meaning that there is always content for users to see.

Initial Business Plan



Commercialisation

Currently the market does not have a service which offers the same level of personalisation as BirdCatcher. There are various systems that are available which allow users to track tweets posted by multiple users or to search for several *hashtags*, however BirdCatcher is the only system that offers users the ability to do both at the same time. Allowing for a greater level of customisation and usability.

BirdCatcher will offer companies a more focused interaction with the public. Reaching more people who don't otherwise use Social Media. The benefit of this for companies is an increased audience and an enhanced platform for communicating with the consumer.

Upon release BirdCatcher will be available as a monthly subscription service. Allowing customers instant access to the great features BirdCatcher has to offer.

Along with access to the premium features users with a subscription will have an advert free environment.

Subscription breakdown:

Type	Features	Cost
Premium User	All Access	£60 per month
Non-Premium User	Adverts, no maps	Free
Basic user	Access to content	Free

Marketing

Due to the lack of direct competitors the public will need be well informed about what exactly BirdCatcher can provide. The main marketing strategy will be direct communication with business, making site visits to pitch the product to the client. Gaining a small number of businesses to start using and promoting the product will be integral, once businesses start seeing how useful and advantageous BirdCatcher is they will want to start utilising it for themselves.



Another major marketing strategy will be conferences and grander sales pitches to a much broader audience at trade shows. These conferences will show the benefits of using the product and they will be able to promote BirdCatcher to a large target market at once will bring in potential customers and an increased presence.

A small-scale advertising campaign will also help promote the product. Advertising on Twitter and other Social Media websites and in business periodicals will be seen by both companies and users who will then become more aware of the features and benefits offered by BirdCatcher.

Technical Details

Overview

BirdCatcher is a new way to view and manage a company's Social media presence. Gathering data from twitter and displaying that in a personalised way. This is made possible by using the Twitter API to gather tweets requested by the user before storing it in a database. Storing the data in a database will reduce the resources required to continually update the stream of tweets coming through. This will also mean BirdCatcher will be available even when twitter is down. Users will be able to set custom filters for what will be displayed and whose content will be visible.

How our system works

BirdCatcher is a Django driven. Web system which makes use of the Twitter search API to GET tweets based on parameters such as Twitter handle (@BirdCatcherTest) or/and Twitter hashtags (#BirdCatcher). The API will provide the tweets which we will store in a database. These tweets will then be displayed on the webpage.

Our system requirements

- The BirdCatcher system will require a web server which is compatible with the Django framework.
- At least 1 person to carry out basic admin duties.
- Guaranteed to work with latest versions of Google Chrome, Mozilla Firefox, Microsoft Edge and Safari.
- Viable internet connection and hardware by which to run system.

Twitter stream

The BirdCatcher system will make use of the Twitter search API. This is achieved by sending a query to Twitter, this query makes use of Twitter credentials with AUTH codes to successfully retrieve the information required. Predetermined and set by the account holder.

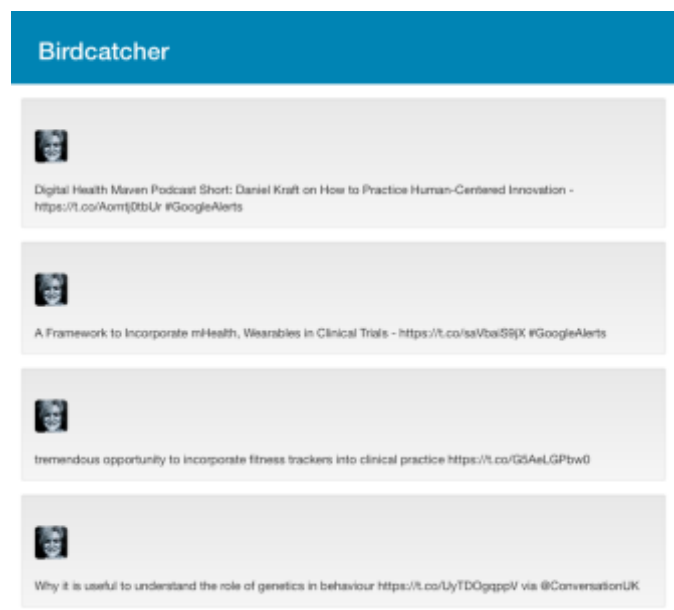
The Twitter API sends back JSON information (tweets) which will be decoded and stored for later use by the system. In doing so the system avoids crashing due to Twitter downtime. This Twitter stream will be in real time and thus allow for recent information to be displayed for the company using the system.

JSON Logic

The JSON being retrieved via the twitter stream mentioned above is stored. This allows for easy decoding and retrieval of the information being sent to the BirdCatcher app. The JSON response gives our system large amounts of useful information such as images, videos, profile pictures, and text. This information is then processed with python and on your webpage.

Display

The BirdCatcher system makes use of Bootstrap, an intuitive and powerful front end framework. It has allowed the system to display tweets in a card style format. The display is also responsive as it works for both mobile and non-mobile devices. The system will use responsive loading, ensuring the webpage loads quickly.



The Future

Prototype to Product

The current state of the project is a prototype, which is just a proof of concept. There are many features that are still to be implemented. These are as follows;

- Admin functionalities as these are currently defined statically.
 - Admin can set Hashtag filters.
 - Admin can set Handle filters.
 - Delete Tweet from view.
- User functionalities
 - Visualisation of Tweets on map.
 - Search the available collection of Tweets.
- Database system
 - Store tweets.
 - Admin login information.
 - Saved hashtags and handles.

As you can see, there are a lot of exciting new features coming to BirdCatcher in the immediate future. Given the success of the prototype, we hope as customers that you can see the potential in our product and can also visualise the end system. Despite the prototype being barebones it is perfect for quickly showing you as our customer what our product is going to offer you and how you could implement it.

Product Evolution

BirdCatcher is a subscription service, because of this you will experience the evolution of our product throughout the years to come. We can't wait to show you all the great features we hope to implement in the future.

Visualisation of Tweets on Open Maps

An exciting feature, not only will users be able to view the tweets but also where they have been tweeted from. The user will be able to see this information via a map view where tweets will be plotted per the location they were sent. This allows for the analysis of trends from a geographic location. This relates back to our goal, the refinement of Twitter's vast data. Map views are the next step.

Increased Scope

Currently Twitter is a prominent social media service. However, it isn't the only way. The future success of BirdCatcher is determined on its cultural relevance. To stay relevant, we must extend to new audiences. Facebook, Instagram, Pinterest and Tumblr are immediate implementation goals which we hope to achieve in the near future. BirdCatcher will also look to evolve, implementing new social medias if they gain a reasonable user base.

BirdCatcher Widget

How do I implement BirdCatcher with my website? This is a question that the developers at BirdCatcher are constantly concerned with. In the future, BirdCatcher should be available to customers as a widget. Giving the customer a simple set and forget implementation. All the user will have to do is install BirdCatcher to their Django project, set the parameters and watch the results come in.

Accessibility

The system in the future will be more accessible for disabled users this will be achieved via the use of alternate text for images, differing colour schemes for users, and resizable tweets for the visually impaired so as to minimise their impairment whilst using the system. Clearly readable fonts will be used with resizable text so that users can change the size to suit their needs in the future.