# BBBS Event Finder App – Status

## Current Functionality

The app has been upgraded from the original Hack4Austin prototype, to provide the following features:

* Event information is pulled directly from the BBBS of Central Texas Google Calendar, specifically the following:
  + Event title
  + Event description
  + Event location
  + Additional data can be added to the description field to enhance the event display in the app:
    - Event URL / web link
    - Event category
    - Price range
    - Age range
    - Street address (a slightly more strict street-address style address, which will produce more reliable mapping results with ESRI’s ArcGIS geocoding – ArcGIS appears to be more picky than Google maps in the respect based on testing)
* The user interaction for the app is as follows:
  + When the app first loads, it attempts to locate the user geographically based on their Internet address and then center the app map on their location. The user can optionally enter an address in the map search field to center the map on a location of their chosing.
  + The user can optionally select various event filtering criteria from the provided drop down menus (event **category**, **cost**, **age-range**).
  + The user then picks a date on which to search for events. At this point, the app connects to a custom backend server which loads all available events for that date as well as any available geolocation / mapping data (to allow them to be plotted on the app’s map display).
  + Once the search completes, the available events are listed in the **Results** drop-down menu. Events which had a geocode-able address (ie, also show up on the map) will have an asterisk (\*) prefixed to their name in the menu as well.
* The app is currently implemented as a PC + mobile / tablet- friendly website, found at the following URL: <http://bbbsevents.org/>

## A Note about Event Addresses and Mapping

In testing, it became apparent that Google Maps is a lot more lenient about what kind of addresses it will successfully map, compared to ESRI’s ArcGIS. ArcGIS functions best when mapping address of the format “123 Some Street, City, State” – whereas Google Maps will happily take addresses in more varieties, like for instance “Texas State Capitol (N. Congress Ave and MLK), Austin, TX”.

In order to get the best results using ArcGIS, event addresses will need to be entered in the more strict format “123 Street Name, City Name, State”. We can do this in a couple of ways:

1. In Google Calendar’s “Where” field for calendar entries, we can use the more strict address formats (will work fine with Google Maps and ESRI ArcGIS)
2. I have added the ability to parse some custom tags in event description fields, one of which is an “address” field, which can be used to enter a more strictly formatted address.

We can discuss and figure out what we want to do in the long run here – maybe we can loop in the person at BBBS who is the owner of the events calendar?

## Upcoming Functionality

The following are next on the to-do list for app feature additions:

* Add a new event source (new Google Calendar) for Match Discount Partners, so that these can also feed directly into the app search results. The plan here is that Stefan will create a new public Google Calendar, populate it with the current list of Match Discount Partners, and share this calendar w/ the [bbbsctxcalendar@gmail.com](mailto:bbbsctxcalendar@gmail.com) Google account so that the BBBS team can modify it as well.
* Improve the formatting of the event details display pop-up dialog (e.g. add paragraph breaks, make event web-links into clickable URLs, etc.). Stefan will be making these changes ASAP.
* Publish both iOS and Android apps to the iTunes / Google Play stores, which would provide a nice entry-point to the web-based app. Stefan will start on this when he is back in the US.
* Possibly add back in some additional mapping functionality, such as the drive-time polygon from the original prototype?

These are some back-end / operational improvements that will be done as well:

* Add method to see how many ArcGIS credits our account has left (because when these reach 0, no new addresses will be able to be geocoded / mapped!) Stefan will be making these changes ASAP.
* Add some basic metrics / analytics to the app site (probably via Google Analytics), to give insight into how often the app is being used, how users are interacting with it, etc. Stefan will start on this when he is back in the US.
* Add some additional stat tracking to the backend database (such as tracking # of geocoded addresses versus cached geocode data retrieved, etc., to measure efficiency) Stefan will be making these changes ASAP.