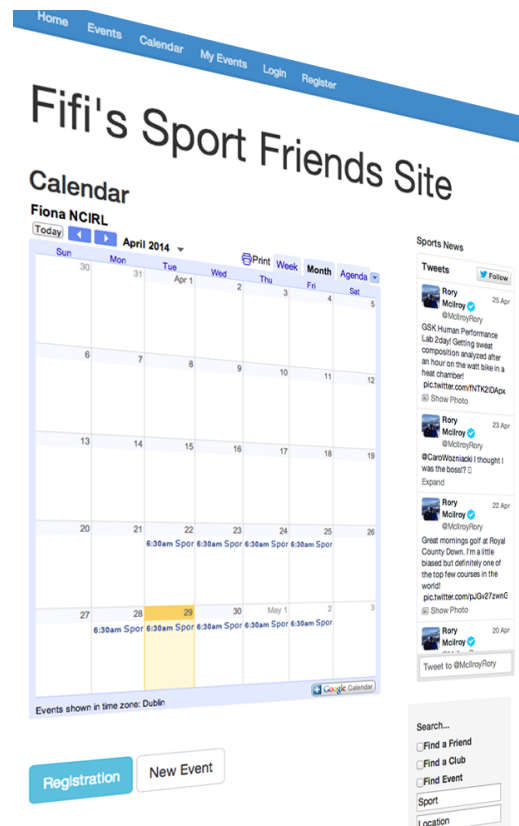


GOOGLE APP ENGINE



28/04/2014

Fiona Mc Andrew
13121693
MSc Web Technologies

Source Code can be found here: <https://github.com/fifimac/GoogleAppEngine>
Deployed application can be found here: <http://fifissportsfriends.appspot.com/>

SUMMARY

Google app engine is a platform as a service (PaaS) offering which facilities developers to build and run applications on Google's infrastructure. *Fifissportsfriends* has been built as software as a service (SaaS), which sits on the Google app engine platform.

The application allows users of the Google platform to find sporting events in their area they can attend, or create a new event of their own. To use the Google platform a user only needs have a Gmail account.

A typical use scenario of the application would be if a person was new in an area they could find people in the area who likes playing Tennis, and arrange to meet up to play a game. Users can use their existing Google Contacts to add them to the event. If an event is created, it will be added to the users Google calendar, if a friend agrees to the event, it will be added to their calendar.

TECHNOLOGY

This application is deployed on the cloud in Google's app engine environment. It uses a python 2.5 runtime interpreter and standard Python libraries.

The advantages of using the Google app engine environment include:

- Easy to build,
- Easy to maintain,
- And easy to scale as the application's traffic and data storage needs change.

All of the above are common to most cloud offerings, however Google app engine deliveries the added advantage of additional features such as integration to their popular ecosystem of services like Google mail and calendars.

FLOW OF APPLCAITON

Accepting terms of use

On navigating to the site, a user will be prompted to accept the terms of use, before they are authorized to proceed.

'Sports Friends Access is needed to your Google Calendar and Contacts to use this application! Please click the link below if you wish to continue, if you have any difficulty sharing your data with us, just close this window now!

Sign in`

Sign in

If the user accepts they go on to the next page, to sign in through their Google account.

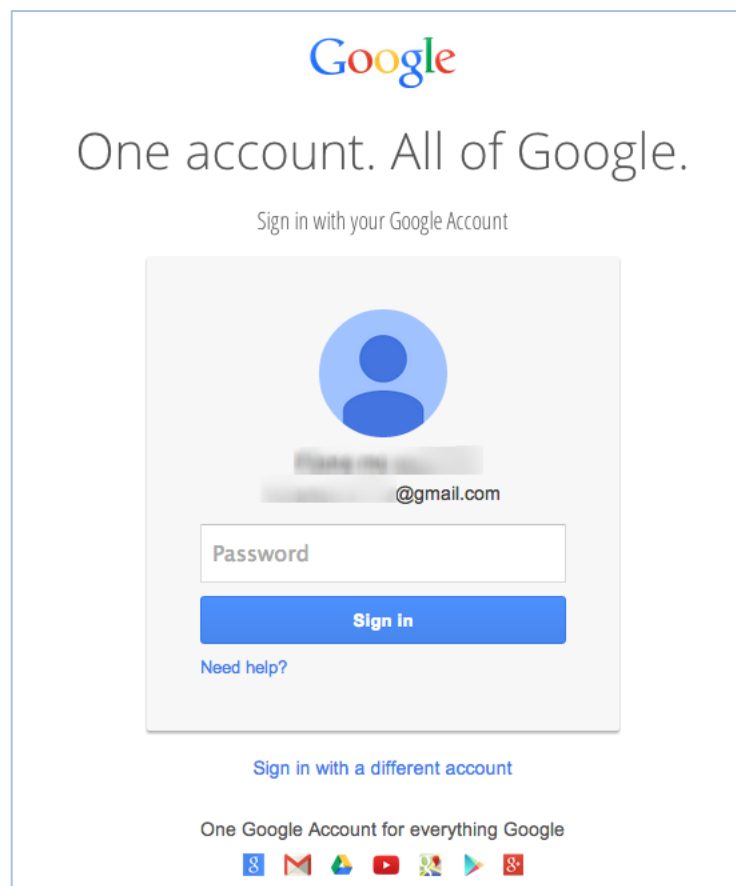


FIGURE 1 SIGN INTO GOOGLE ACCOUNT

[Continue onto home page](#)

[Home](#) [Events](#) [Calendar](#) [My Events](#) [Login](#) [Register](#)

Fifi's Sport Friends Site



Welcome




Fifi's Sports Friends allows sporting individuals meet up to participate in sporting events. The site uses oogle Maps, Calendar and Contacts to provide the functionality to you, the end users.



[Registration](#) [New Event](#)



Sports News

Tweets [Follow](#)

**Rory McIlroy**  25 Apr
@McIlroyRory
GSK Human Performance Lab 2day! Getting sweat composition analyzed after an hour on the watt bike in a heat chamber!
pic.twitter.com/fNTK2IDApX
[Show Photo](#)

**Rory McIlroy**  23 Apr
@McIlroyRory
@CaroWozniacki I thought I was the boss!? 
[Expand](#)

**Rory McIlroy**  22 Apr
@McIlroyRory
Great mornings golf at Royal County Down. I'm a little biased but definitely one of the top few courses in the world!
pic.twitter.com/pJGv27zwnG
[Show Photo](#)

**Rory McIlroy**  20 Apr
@McIlroyRory
[Tweet to @McIlroyRory](#)

Search...
☐ Find a Friend
☐ Find a Club
☐ Find Event

[Sign out](#)
[Search](#)

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[Back to top](#)

FIGURE 2 INDEX

Login page

The log in page confirms that the user has successfully signed in.

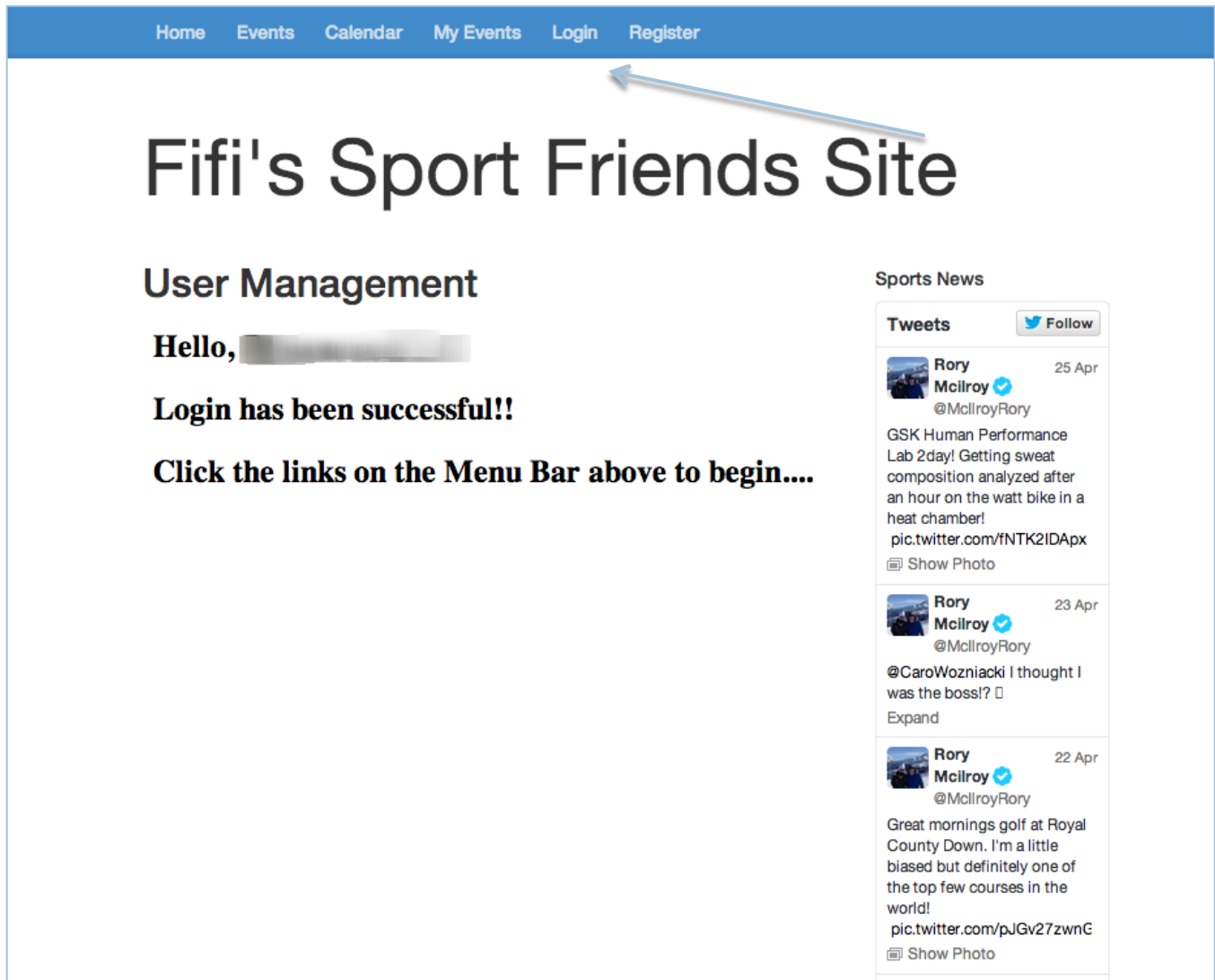


FIGURE 3 /LOG IN

Register

Through the register page the user can provide the application additional details about themselves and upload a Google calendar owned by them. This calendar will then sync with the application.

[Home](#) [Events](#) [Calendar](#) [My Events](#) [Login](#) [Register](#)

Fifi's Sport Friends Site

User Management

User Registration

First Name:

Surname:

Address:

Address2:

City/Town:

County:

Phone:


Calendar Link:

Brief Description of your Interests

Sports News


Tweets

[Follow](#)

 **Rory McIlroy** 
@McIlroyRory

25 Apr

GSK Human Performance Lab 2day! Getting sweat composition analyzed after an hour on the watt bike in a heat chamber!
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@McIlroyRory

22 Apr

Great mornings golf at Royal County Down. I'm a little biased but definitely one of the top few courses in the world!
pic.twitter.com/pJGv27zwnG
[Show Photo](#)

FIGURE 4 /REGISTER

Calendar

If a calendar link was successfully submitted, a calendar like the following should appear.

Home Events **Calendar** My Events Login Register

Fifi's Sport Friends Site

Calendar

Fiona NCIRL

Today April 2014 Print Week Month Agenda

Sun	Mon	Tue	Wed	Thu	Fri	Sat
30	31	Apr 1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22 6:30am Spor	23 6:30am Spor	24 6:30am Spor	25 6:30am Spor	26
27	28	29 6:30am Spor	30 6:30am Spor	May 1 6:30am Spor	2 6:30am Spor	3

Events shown in time zone: Dublin

Registration New Event

Sports News

Tweets

Follow

Rory McIlroy 25 Apr
@McIlroyRory
GSK Human Performance Lab 2day! Getting sweat composition analyzed after an hour on the watt bike in a heat chamber!
pic.twitter.com/vNTK2IDApX
Show Photo

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Rory McIlroy 20 Apr
@McIlroyRory
Tweet to @McIlroyRory

Search...

☐ Find a Friend

☐ Find a Club

☐ Find Event

Sport

Location

Sign out

Search

FIGURE 5 /CALENDAR

Creating new events

To create a new event, the user needs to click on the 'New Event' call to action button, which is a partial on each page. Here an event can be named, described and have a date and location assigned to it. The user can also invite friends to the event from this form.

[Home](#)
[Events](#)
[Calendar](#)
[My Events](#)
[Login](#)
[Register](#)

Fifi's Sport Friends Site

New Event

Event:

Description:

Date:

Location:

Map data ©2014 Google Terms of Use

Google Contacts:

Use the 'Control' to select multiple.

Sports News

Tweets

[Follow](#)

Rory McIlroy [@McIlroyRory](#) 22m

Wishing you a speedy recovery @NotahBegay3!! Hope to see you back walking the fairways very soon! Expand

Rory McIlroy [@McIlroyRory](#) 25 Apr

GSK Human Performance Lab 2day! Getting sweat composition analyzed after an hour on the watt bike in a heat chamber! [pic.twitter.com/fNTK2IDApX](#) Show Photo

Rory McIlroy [@McIlroyRory](#) 23 Apr

@CaroWozniacki I thought I was the boss!? Expand

Rory McIlroy [@McIlroyRory](#) 22 Apr

Great mornings golf at Royal

Search...

☐ Find a Friend

☐ Find a Club

☐ Find Event

Sport

Location

FIGURE 6 NEW EVENTS

IMPLEMENTATION

Basics:

1. Sign in to Google App Engine using you (the developers) Google login.
2. Click the create application button. This will re-direct to a page asking for a mobile number to send a setup code to. Enter your mobile number, a code will be text to your phone.
3. Enter an application Identifier, this must be unique, try a name and click the Check Availability button.
The application identifier for this application was *fifissportsfriend*.
4. Enter an Application Title; the application title for this application is *Sports Friend*.
5. Agree to the Terms and Conditions.
6. Fill in the rest of the form.
7. Create the application.
8. Download the Google App Engine SDK for Python.
9. Run the installer for the Google App Engine.
10. Install Python.
11. Run the Google App Engine Launcher.
12. Open the Google App Engine Launcher.
13. Create new application and add the lecturer's boiler plate sample.
14. Deploy the application to the Google App Engine.
15. Check it is working and monitor the Google app engine dashboard.

Additional changes

1. The html and css of the original boiler plate sample was tidied up.

This was achieved by:

- Removing deprecated code,
 - Restructuring the CSS and JS files to all sit within a static folder,
 - Refracting code associated with these files
 - And changing the CSS to give the site a simpler aesthetic.
2. A live tweeter feed of the sportsman Rory McIlroy activities was added to replace the static News Items.

FUTURE IMPROVEMENTS

Application Issues:

Issue 1:

This application was originally developed in Python 2.5 runtime. Python 2.5 has deprecated. It would have been best practice to migrate the application to python 2.7, however I was decided that the project time line was too short to migrate. For future improvement it is strongly recommended that the application migrates to the supported version.

Issue 2:

The “create event” form is not functioning and the myEvents and Events are not displaying correctly. Future improvements of the project should fix these issue.