**Team Name:**

COSC Team

Include a diagram showing how the work will be partitioned between the prototype proper and the emulator. –have we done this?

**Brief description of the application and how the work will be partitioned between the emulator and application: *--- has this been done?***

**Personal Descriptions:**

James Cross 1350026

Jamesdcross@gmail.com

Java Programming Experience

Experience writing reports

Managerial skills

Organisational skills

Presentational skills

No experience with SVG, The Canvas Element, HTML 5, JavaScript, CSS

Callum Tanner 2506432

tannercallum020@gmail.com

Previous experience with HTML5, CSS, Java.

No experience with HTML5's Canvas element, JavaScript, or SVG.

Personally well organised with good communication skills and written English. Experience working in small teams in a professional environment.

Limited creative ability.

-"I'm good at solving problems. I'm bad at coming up with new creative directions."

Hussain Almarhoon 344651

silver-moon1412@hotmail.com

I have done Python, Java, C, netBeans and I used a little bit of JavaScript in a project through the course.

English is my second language so any part with the language I will stay away from it.

Youssef Alghamdi 7266339

yo\_max.alghamdi@hotmail.com

I have experience with C, CSS, NetBeans and a little with JavaScript.

Not good enough at writing reports as my English is a second language.

Good at managing stuff.

**Justification for using GitHub (Callum):**

For our version control system, we decided to use GitHub. The main reason is that some of us already had experience with GitHub. This means that teaching the other members is easier, rather than everyone on the team trying to learn a new system. GitHub offers a series of features that make it a good choice for version control. Including the ability to regulate which collaborators can access the repository, automatic changelog creation and the fact users can edit the files from anywhere. GitHub is widely used in the industry, this means that learning it now puts us at an advantage for employment.

Repository URL: https://github.com/CTanner020/COSC345.git

**Why we chose to use Dart for our JavaScript (Hussein):**

Nowadays there are a multitude of languages for JavaScript development. After a bit of searching, we have decided to use Dart. Our group is confident that the functionality of this language will suit our purposes.

//\*

**Dart is Google’s proposal for the future of the web.  Dart takes the separation from JavaScript even further, and is a whole new language, designed from the ground up.  It’s what JavaScript might look like if it were designed today.**

The Dart language is not specifically designed for a browser, but more as a general usage language.  Browser-specific functions, such as DOM manipulation, don’t rely on magic global variables, but are provided as libraries.  The language resembles Java in many ways, and most programmers should be comfortable with it in a a day or two.

The fact that Dart compiles into JavaScript is about the only link between the two languages.  In fact, the long-term goal is to have browsers natively implement Dart support – a version of Chromium with a Dart VM already exists.

**\*//**

Dart is a broadly useful programming language that is implied for front end Web development, but can also be used to make numerous different sorts of applications. It compiles directly to JavaScript, so it can be used across all browsers and arguably, it fixes a lot of the problems that JavaScript has.

**Why we chose to use Eclipse for our Editor (James):**

It was originally decided to use Eclipse as our JavaScript IDE however on further investigation into Reddit forums and review sites, no one seems to recommend Eclipse for JavaScript. It's many faults include incorrect code diagnostics and a lack of code folding with very slow startup. I then looked into Webstorm as an alternative, which I think we should try as it is recommended highly. However it does seem like it might have a steep learning curve. Netbeans may be the best option for us at this time as some of us already have experience with it.

**Why we chose to use FireBug for our debugging (Yousef):**

The reason we chose Firebug is because it allows us to edit, debug, and monitor CSS, HTML and JavaScript live in any web page. Also and more importantly it quickly finds the errors when things go wrong and immediately gives you detailed and useful information about the errors in JavaScript, CSS, and XML. In addition, Firebug has a better and cleaner interface for editing HTML and CSS over Chrome.

**Project Roles:**

* Writing report(James)
* Testing the code(James)
* Coding(Yousef)
* Coding(Hussain)
* Manager(Callum)

**Timetable: --time table needs relook**

Learning JavaScript and associated programs(2 weeks)

Emulator(1 week):

* Build the emulator in the browser
* Produce a graphical display for the browser
* Set up communication with the browser

Basic App (2 weeks):

* Calendar to access (reference)
* Add appointments
* One day appointments (testing)
* Display appointments (for one day)

Testing/debugging

Deliver draft system (May 23)

Communication derived from functionality (2 weeks) **–this is confusing**

1 month

Adding Functionality to app

Display accurate date, days and months of the year (leap years etc.)

Display Local/World Events

Adjustable colours of calendar display

1 month

Repeating appointments

Display address of appointment/event location

Priorities for events/appointments

Additional testing/debugging (2 weeks)

**Description of the calendar app prototype (James):**

**Features**

Achievable

• Display accurate date, days and months of the year (leap years etc.) 1

• Display Local/World Events 1

• Adjustable colours of calendar display 1

• Adjustable alert sounds

• Event creation, make appointments

• Repeating appointments

• Display address of appointment/event location

• Priorities for events/appointments

Extra Features (may not be achievable)

• App predictively inserts appointments/events based on past appointments/events

• Import Facebook and Email Contacts –to what? –why do you need contacts in a calendar?

• GPS – tells you where your appointment/event is via Google Maps, tells you if you’re

running late and how long it will take to get there.

• Connection to phone

**Functionality**

The screen size of a smart watch is about 38mm meaning there is not much room, we have opted for a bottom up approach. If we start by looking at the day it would just contain active events/appointments (not every hour of the day) which should fit on one screen (no swiping needed) ideally. If the day is filled with appointments the view would be scrollable up and down to accommodate every appointment.

To enter an appointment, the same scrollable approach would be used. In this mode a more detailed display featuring each hour in the day as a block in a table which you could scroll through. Then you would tap on a block to enter an appointment.

A small back button is the main navigation tool of our calendar app. Navigating from the day display (which is likely the most commonly used display) you would tap the back button to go to week display which displays days instead of hours then months which displays weeks instead of days and so on.





