Final Major Project Report

Interactive Media Design (May 2015)

Andrew McKenna
B00595176
Mentor: Jonathan Wallace
Peer Support Group: 1

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CONTENTS

1.INTRODUCTION

1.1 Overview

This report will cover the work that has been undertaken covering the design and build of the website for both the users and administrators. It will focus on all the activities undertaken through the design process to the final working solution. Note that as a visual person and a photographer by nature the report will make use of visuals to help put in context the work undertaken both in the main report and in the appendix.

1.2 Background

The wedding industry in the UK is worth £10 Billion, with the average cost of a wedding totalling £36,000. Photography within this sector averages out at around £750per wedding. In northern Ireland alone there where 8,366 weddings in 2011. Average money spent on wedding photography in NI £6,275,500. (www.nisra.gov.uk, 2012) Many photographers offer only print and photo services, leaving the bride and groom to go elsewhere to get a wedding photographer that offers a website along with their packages. (Hitched-wife.org, 2015)

1.3 Aim

The aim of this project is to develop a wedding website which allows the users to use the power of Instagram to sync all the wedding party's photos into one space on their website by using a hashtag unique to the couples wedding. The service will be available to all couples who choose to get married, including the LGBT community. (Instagram, 2015)

1.4 Objectives

With any project there will be a list of specific objectives that will need to be met in order to achieve the end result.

- Develop a strong brand. See Appendix D for brand guidelines.

- Outline the website structure and user journeys.
- Wireframe and mockups to design the website.
- Database design.
- Create and RSVP section.
- Create online guestbook section.
- Create back-end system for admin to view RSVP and moderate guest comments.
- Integrate Instagram API.
- Create updatable background images for RSVP and Header sections.
- Test each section as it gets developed into the website.
- Through surveying gain valuable user feedback and evaluate.
- Ensure website is fully functional online.

1.5 Target Market

From the research in the overview section there is a clear market for this project in the wedding industry both within the United Kingdom and globally. The market in the United states is worth £51 Billion.(Grose, 2013). The goal is to target the photographers and web developers within this market. Another angle is to market it towards the wedding couple who are getting married who will ultimately decide whether it is for them or not. The new features will excite the more technological based people such as the Y generation and the future Z generation. (Talentedheads.com, 2015)

2.CONCEPT AND PLANNING

2.1 The Idea

To build a wedding website for wedding couples to host essential (on the day) information, with a unique feature that pulls photographs from the guests Instagram accounts. This will allow for a specific time line of events on the married couples website to gives a new insight to the day of the wedding.

2.2 Management

TeamworkPM is an online management tool that was used to help manage the project. Reminders and important deadlines could be set. The project was therefore divided into tasks and sub-tasks which were time tracked and visualised.(Teamwork.com, 2015) as seen in ***Figure 1***

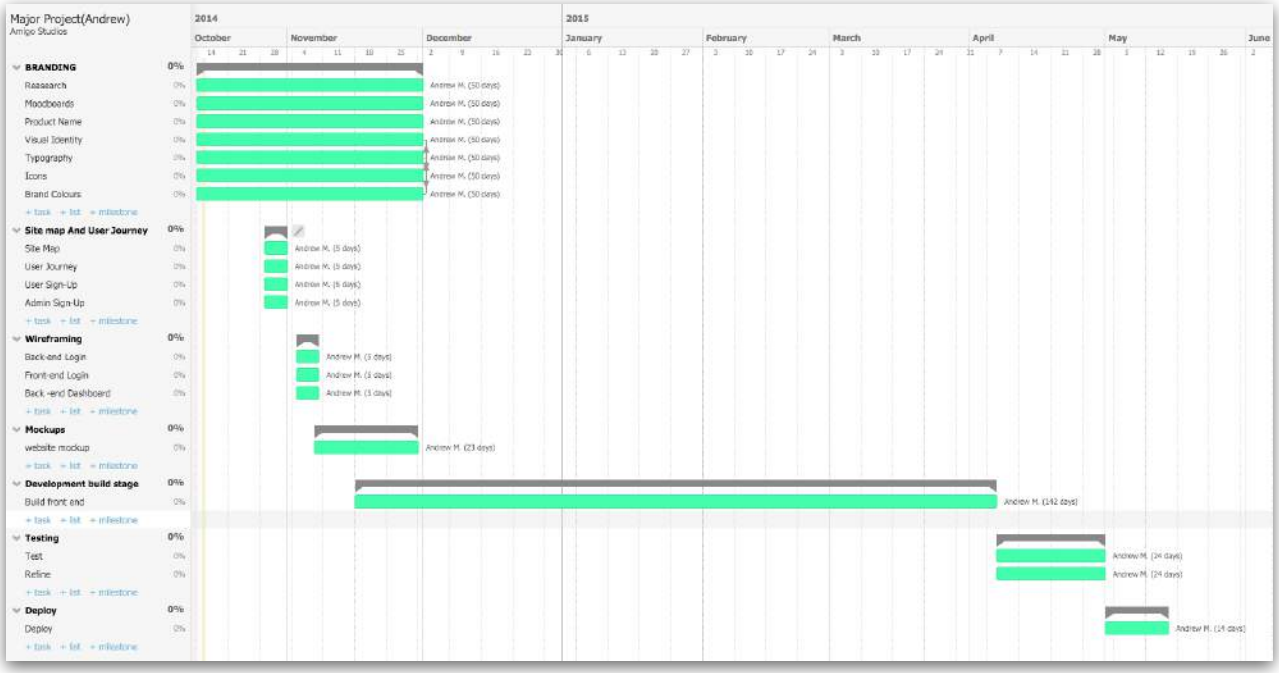


Figure 1

2.3 Methodology

During the process of the project there a number of methodologies available to help assist with the development. Here are a few of them with their basic principles outlined.

RAPID APPLICATION DEVELOPMENT:

- High speed development approach.
- Low investment cost.
- Projects broken into small segments designed to make changes easier during development.
- Prioritises development and delivery deadlines. (Wikipedia, 2015)

WATERFALL:

- Project is split into phases with small overlap in some cases.
- Heavily documented and well planned.
- Easy to finish development as project is clearly managed in stages.
- Project can only be completed once each stage is done in sequence.
- Changes to development are limited. (Base36, 2012)

AGILE:

- Highly flexible, can change development as project grows.
- Deliverables are frequent.
- Requires active user engagement.
- Decisions in development are often required.
- Simplicity is essential.
- Team Based approach.(Interviewpenguin.com, 2015)

The methodology best suited to this project was **Waterfall**.

2.4 Requirements specification

The Volere Requirements Specification Template is widely used within software design to help write a list of requirement specifications. It focuses on a number of aspects that help meet the requirements specification Such as type, priority, description, rationale, fit criterion and dependancies. (Volere.co.uk, 2015)

Snow cards are used within a Volere Requirements specification report to outline the top level requirements of a project. Here is an example of a snow card relating to this project see ***Figure*** 2

Figure 2 Snow Card

More requirements specifications can be seen in Appendix A

3.DESIGN

3.1 Paper Prototyping

In order to have a better idea of what to sketch for paper prototyping, the creation of a mind map ***Figure 3*** would help greatly with this process. A mind map allows you to visualise the information and better generate ideas for the project.

Figure 3 Mind Map.

Here you can visually see your whole site in one graphic, thus helping with the user journeys and site layout.

3.1.2 User Journeys

Lets have a look at the user journeys. User journeys are developed to more closely consider not only the people who will use this system or website but the exact steps or interactions they take to complete a particular task. Here in ***Figure 4*** you can see the user Journey for the Administration

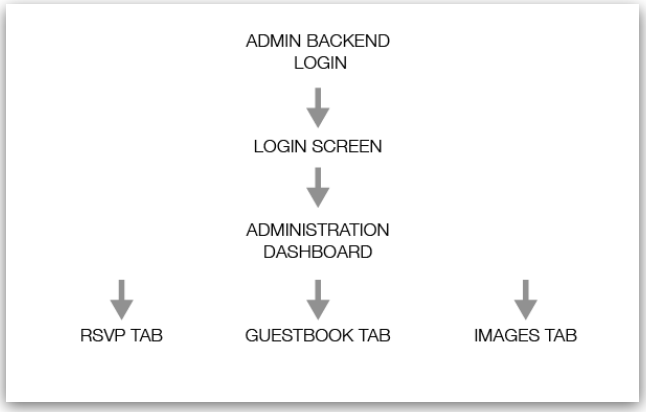


Figure 4

This is the user journey for the admin/moderators of the site. It shows the login through to the dashboard were they will see all activity on their site. The admin/moderator can approve or deny user uploaded comments. They will be able to view the online RSVP and also change the background images for the header image and RSVP sections.

For the visitors and users of the website the user journey is much more simple. ***Figure 5***

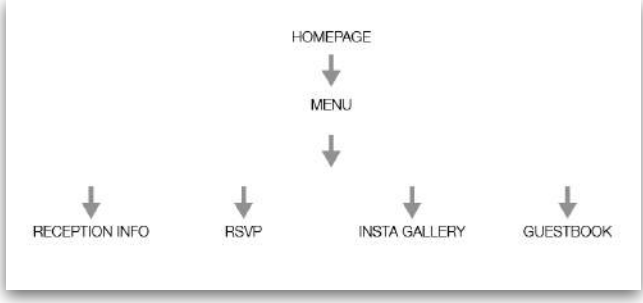


Figure 5

The visitors user journey will be less complicated than that of the admin/moderator. They will access the webpage as normal were they are presented with the site navigation. The main user interaction will take place in the RSVP and the guestbook section.

3.2 VISUAL DESIGN

3.2.1 Initial Sketches

The first stage of sketching out the design of the website were very low fidelity visuals. These are quick paper sketches to start to give an idea of the flow and design of the website.

6 UP

The goal here was to generate six different ways of presenting the same data. This gives you a chance to get ideas out of your head and on to paper, therefore speeding up the prototype process. The up-datable image gallery is a major feature of this project so it needs to be thought out clearly and executed perfectly. (Fiorina et al., 2010)

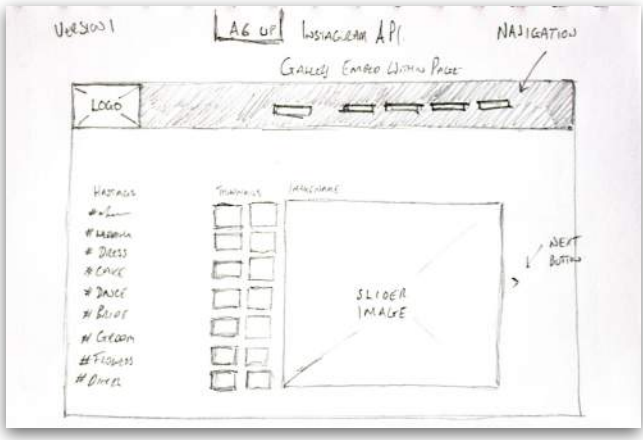


Figure 6

Here we have the image slider in the right hand side of the screen. Along the side of the image is a thumbnail gallery of all the images to allow the user to click and see what they want, overriding the automatic fade to next image.

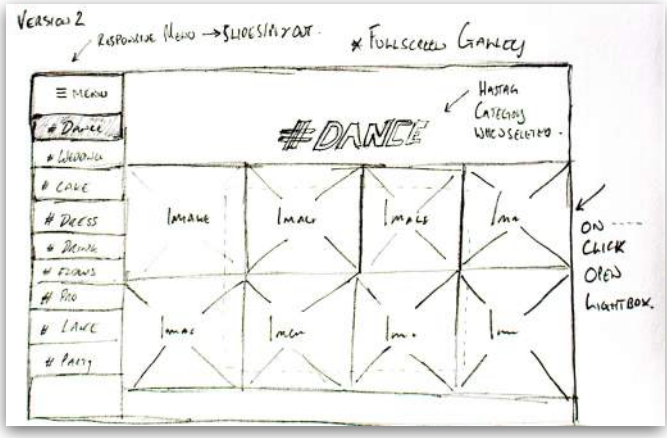


Figure 7

Here have an image gallery which will be full width. The menu to the left will slide in and out when clicked. Again the menu will house the hashtag. The tag will then become the title above the images. The photographs will load in block format with no spacing to form solid rows and columns of images.

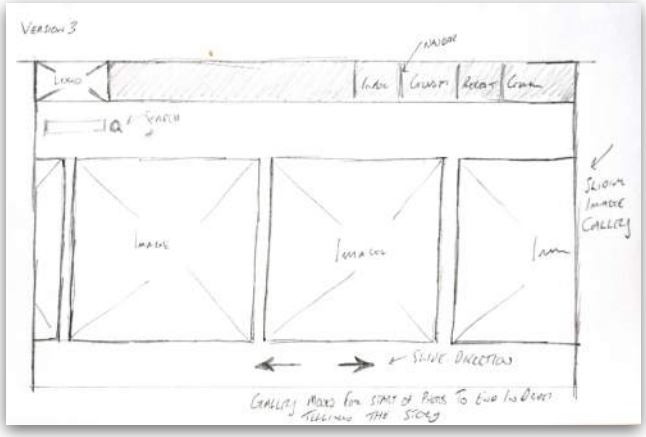


Figure 8

This image slider works across the length of the screen so that the images flow from right to left. The images in this slider will work via the time stamp from the Instagram API to put them in chronological order. So the idea here is that the photography from the guests and family tell the story of the wedding day. The user can scroll through the images which will slide into and out of the screen.

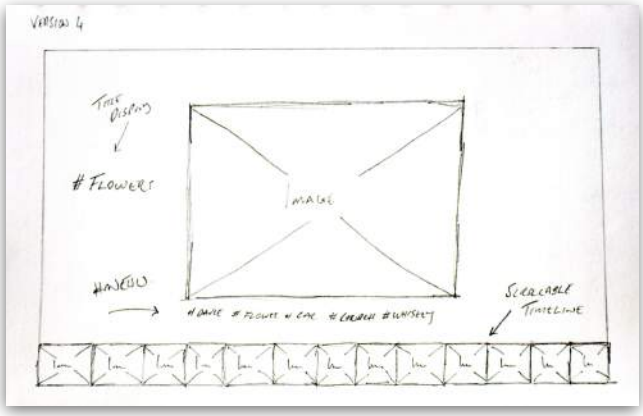


Figure 9

In this version the navigation for the images is along the bottom of the page. Again this is sorted into chronological order. When clicked the selected image will show up in the main display (Auto scroll if no click). Below the main display and above the image navigation will be the searchable hashtag section.

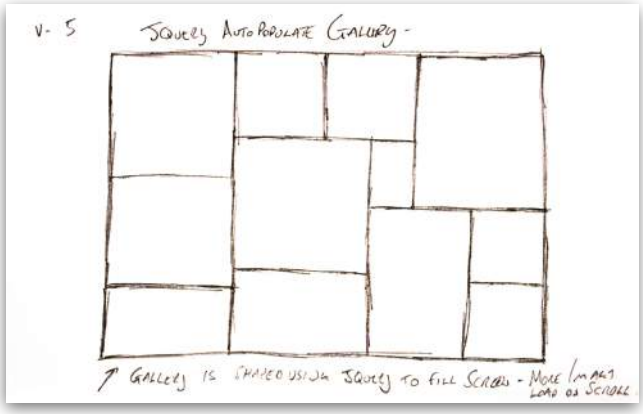


Figure 10

Using the power of jQuery and JSON we can auto populate the photo-gallery to load up the images in a unique style like above. The images are loaded with JSON and presented using jQuery, when its activated the images fill the screen. When the user scrolls down the page more of the photos will load into the page.

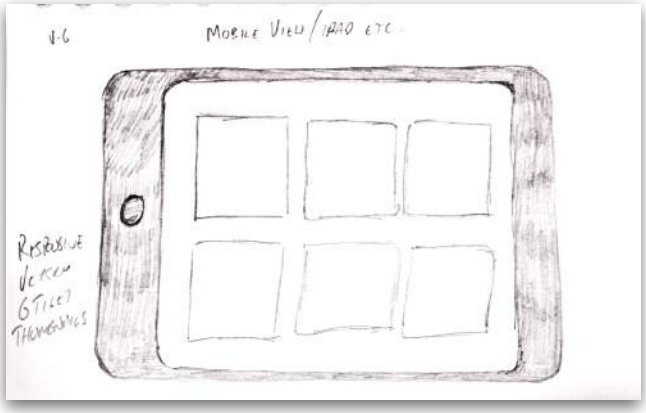


Figure 11

Grid style view of the image section. Possible view of a responsive version of the gallery. Loads into thumbnails for the user to select and open individually. Or select and scroll right to left with the image full-screen. This option is clean and will be user friendly for easy navigation through images.

After the 6 UP designs it was decided that the style in ***Figure 11*** above would represent the style to be associated with the Instagram photo gallery. The reasons for this is that it looked the cleanest and most simple for the users to navigate. See Appendix B for more Initial sketches.

3.2.2 UX Design Evolution

Following the initial sketches the next stage in the process was to create more refined visuals. These visuals show the progression of the user experience and start to show a more refined approach to the make up of the website in both desktop and mobile format. *“Dont make me think” Steve Krug (Krug, 2006)*

MAIN SCREEN

The main screen holds a navigation section which holds the menu in the top right hand section. Also in the header section will be the Insta Wedding logo.

The page holds a large full-screen image in which the content will sit over by using the z-index. This image will be changeable via the administration in the back-end system. An RSVP button takes the user directly to the RSVP section to sign up to the wedding digitally. See ***Figure 12***

Figure 12 Main Screen Desktop

The wireframe shows how the main screen of the website will look. You can see the navigation, logo, RSVP button and the full-screen image background.

Figure 13 Main Screen Mobile

The mobile versions show how the site was going to look before it was designed on the computer. going through this design process saved time in the later stages of the project when it came to the development and build stage.

Many more refined visuals for both desktop and mobile views in Appendix C.

3.3 SYSTEM DESIGN

3.3.1 System Structure

In order to help build the system structure it was important to visualise it first, so to see the relationships of the various components.

3.3.2 Client Server Model

Here we will visualise the network architecture of the system as shown in ***Figure 14***

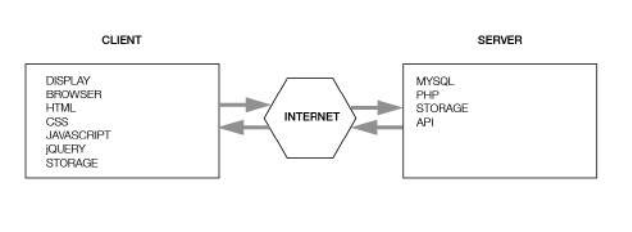


Figure 14

Client server model diagram showing the relationships between the client side and server side.

3.3.4 User RSVP & Admin Back-end Login

This data flow diagram shows the relationship for both the user to reply to the wedding invitation via the electronic RSVP and also the admin to view the replies via the database.

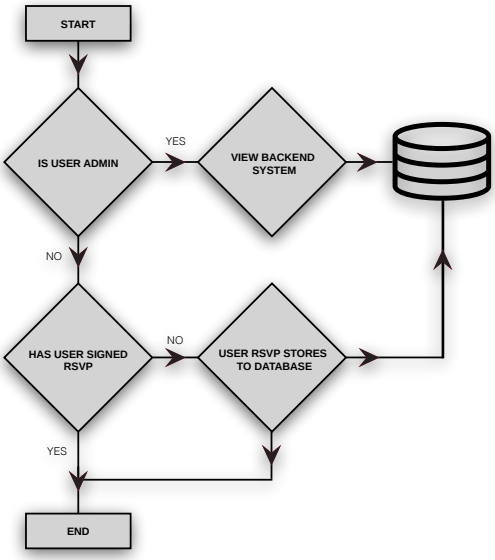


Figure 15

IF user is admin they will login to view back-end dashboard. If the user is a guest they will sign guestbook from the instructions received via invitations sent out via post. Guest will sign RSVP and Accept or Decline invitation. Admin can view the guest response via back-end dashboard.

3.3.5 Guest Book Sign

This is the diagram for the user to sign the guestbook. The diagram shows how the user will interact with the server and shows how the PHP (Php.net, 2015) will store and return the content to and from the database, resulting in the display of the guestbook content (once approved by admin). ***Figure 16***

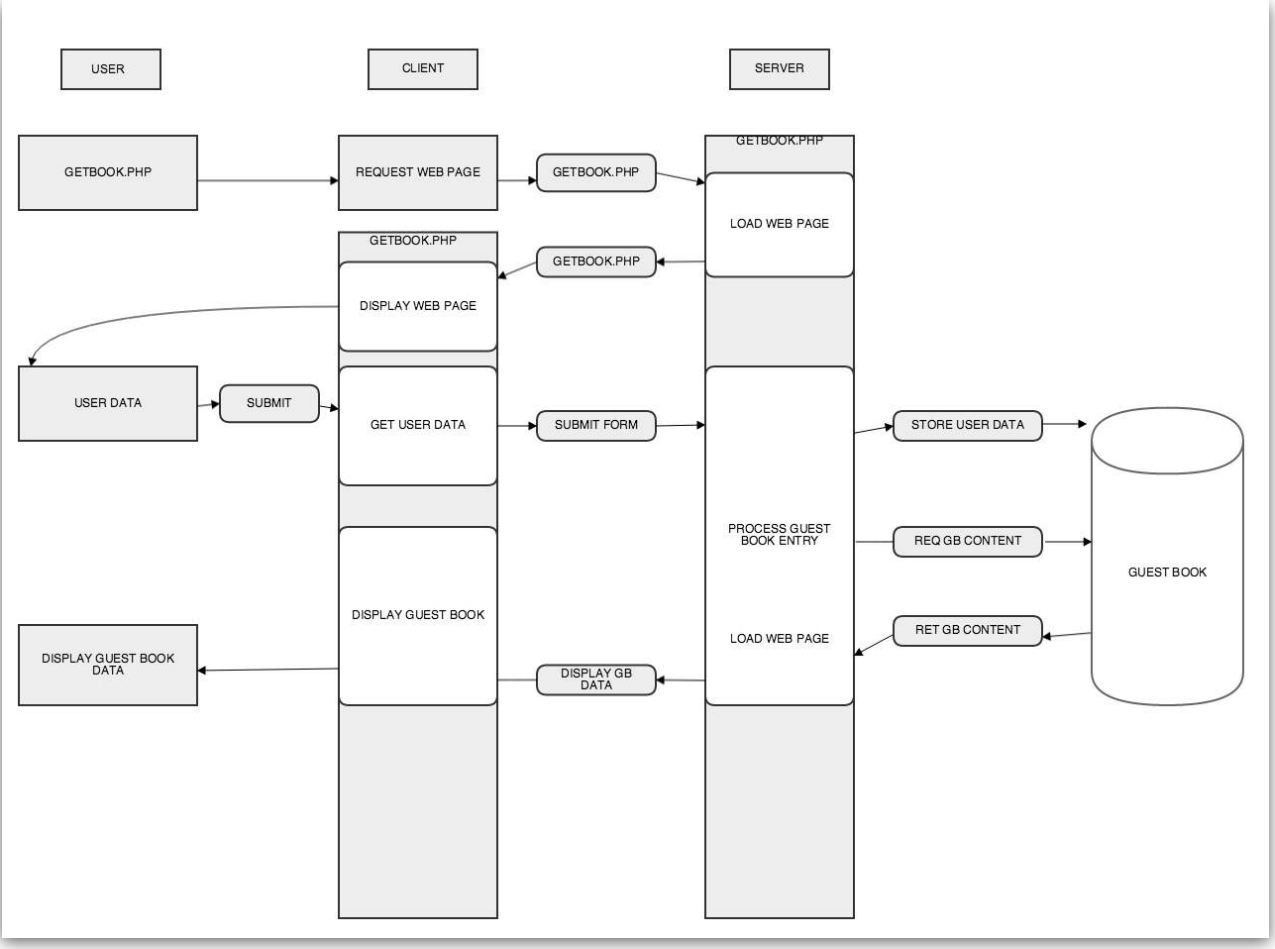


Figure 16

3.3.6 Instagram Authentication Flow

Below diagram shows how the Instagram API Authenticates the user to access the content on Instagram. (Blogs.wrox.com, 2015) ***Figure 17***

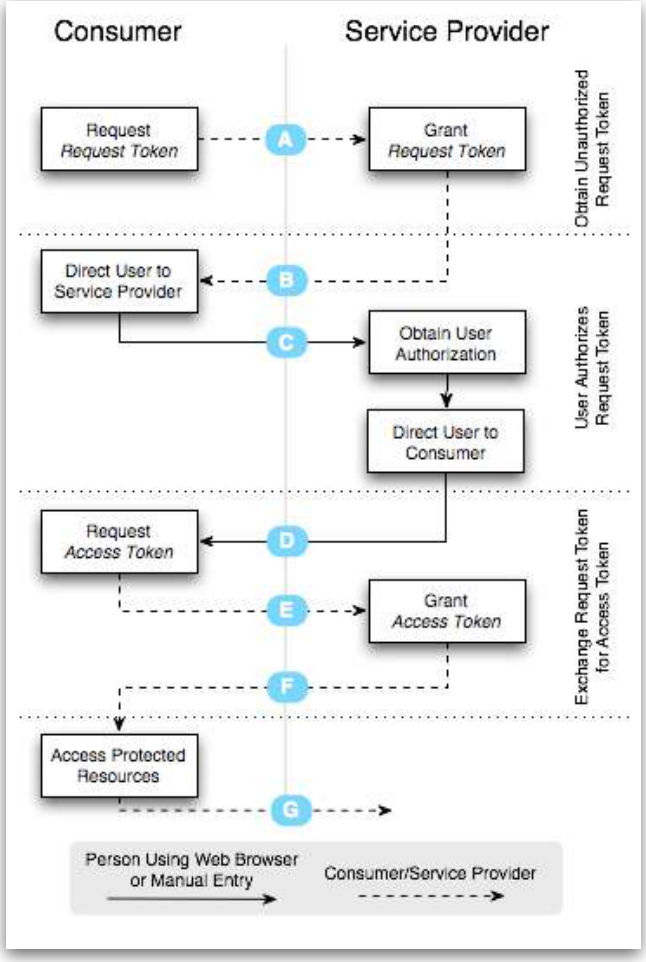


Figure 17

Instagram API authentication diagram, it is important to understand how the information is pulled from Instagram in order to create the gallery within the website.

3.3.7 Database Design

Below we have a diagram to show the relationships within the database. The data needs to be stored so that we can link the information correctly. This shows the relationship between the Admin, the users, updatable images within the database. See *Figure 18*

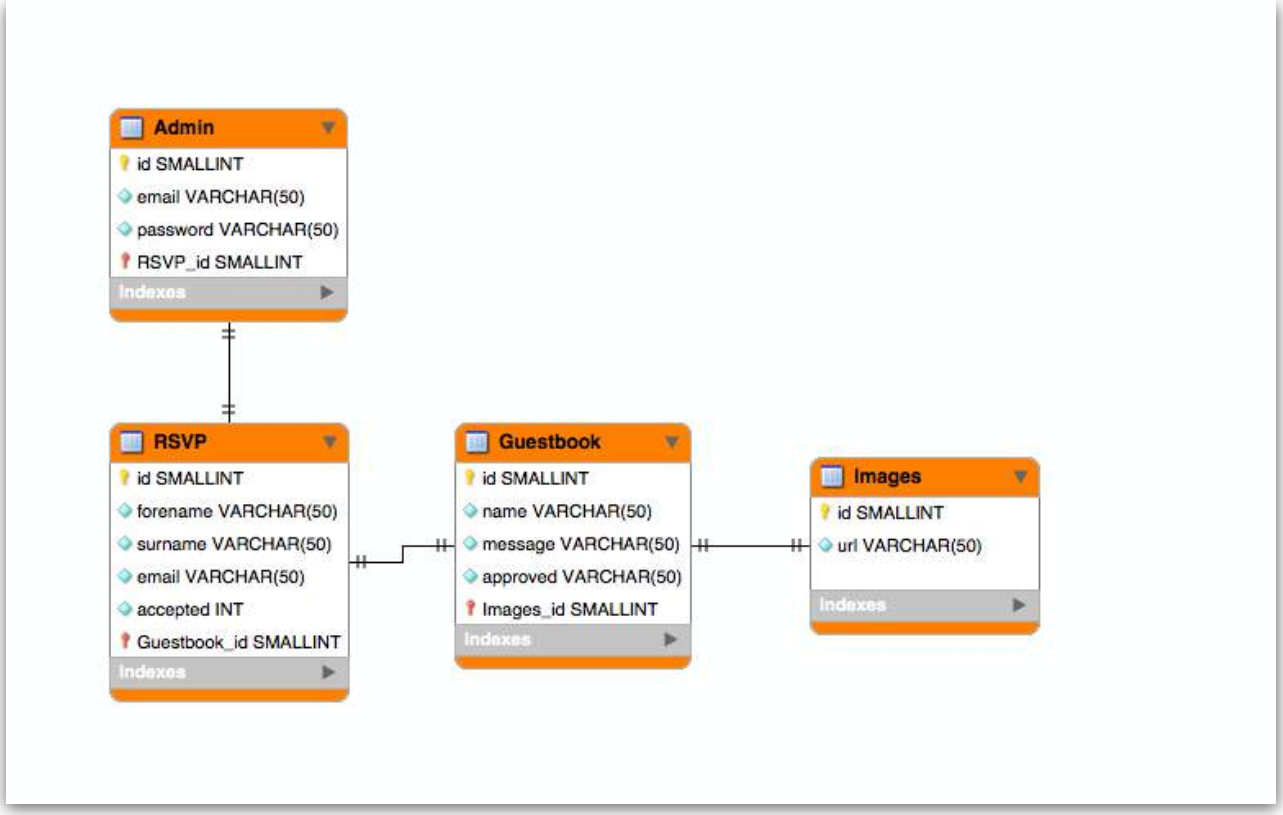


Figure 18

Administrators will have access to view all the RSVP replies. There is also be a section in the database to store the guests comments for the guestbook. Admin then see the message in the back-end and choose to approve or disapprove if the comments are not suited to the website. This gives the admin control and piece of mind that you cant just upload any silly message. Images for the backgrounds of the RSVP and Header image of the website are also stored in the database. Admin then select whatever image is best

suited to their tastes and have the ability to change the RSVP section to look just like there paper invitation.

4. IMPLEMENTATION

4.1 Technology

In creating of the project there was a wide range of technologies used. These included server-side languages, client-side languages, a database, frameworks and libraries.

4.1.1 Server-side

PHP

PHP (recursive acronym for PHP: Hypertext Preprocessor) is a widely-used open source general-purpose scripting language that is especially suited for web development and can be embedded into HTML. What distinguishes PHP from something like client-side JavaScript is that the code is executed on the server, generating HTML which is then sent to the client. The client would receive the results of running that script, but would not know what the underlying code was. You can even configure your web server to process all your HTML files with PHP. The best things in using PHP are that it is extremely simple for a newcomer, but offers many advanced features for a professional programmer. (Ullman, 2005)

The reason for choosing PHP is because its fairly easy to learn and there is an active user community with plenty of documentation online for troubleshooting. Everything's built right into the language and it is free. PHP is also cross platform which means it will work in all browsers.

4.1.2 Client Side

jQuery

jQuery is a JavaScript framework, which purpose is to make it much easier to use JavaScript on your website. You could also describe jQuery as an abstraction layer, since it takes a lot of the functionality that you would have to write many lines of JavaScript to accomplish and wraps it into functions that you can call with a single line of code. It's important to note that jQuery does not replace JavaScript, and while it does offer some syntactical shortcuts, the code you write when you use jQuery is still JavaScript code. You don't need to be a JavaScript expert to use jQuery. In fact, jQuery tries to simplify a lot of the complicated things from JavaScript, like AJAX calls and DOM manipulation, so that you may do these things without knowing a lot about JavaScript. (Jquery-tutorial.net, 2015)

The reason for choosing jQuery is it is a lot more easy to use compared to standard JavaScript and other JavaScript libraries. jQuery has a large library of functions and again a large online community of developers.

JavaScript

JavaScript is a cross-platform, object-oriented scripting language. JavaScript is a small, lightweight language; it is not useful as a standalone language, but is designed for easy embedding in other products and applications, such as web browsers. Inside a host environment, JavaScript can be connected to the objects of its environment to provide programmatic control over them.

Client-side JavaScript extends the core language by supplying objects to control a browser (Navigator or another web browser) and its Document Object Model (DOM). For example, client-side extensions allow an application to place elements on an HTML form and respond to user events such as mouse clicks, form input, and page navigation. (Flanagan, 1998)

The reason for choosing JavaScript is as Its client side JavaScript is very fast due to the code being run immediately instead of having to wait for a server to respond and answer. As its client side reduces the demand on the web server.

JSON

JSON is short for JavaScript Object Notation, and is a way to store information in an organised, easy-to-access manner. In a nutshell, it gives us a human-readable collection of data that we can access in a really logical manner. (Copter Labs, 2009)

Ractive.js

Ractive.js is a template-driven UI library, but unlike other tools that generate inert HTML, it transforms your templates into blueprints for apps that are interactive by default.[4] Ractive.js is designed to be as simple as possible, but no simpler. That's because of its heritage: it was created in the newsroom of theguardian.com for building interactive news applications. These apps have to be built in a very short space of time and work reliably across different environments – there's no time for prototyping etc. Just build it and ship it. You can't spend long optimising things, so the library has to make smart decisions for you. (Blog.ractivejs.org, 2015)

4.1.3 Database

A database is stored as a file or a set of files on magnetic disk or tape, optical disk, or some other secondary storage device. The information in these files may be broken down into records, each of which consists of one or more fields. Fields are the basic units of data storage, and each field typically contains information pertaining to one aspect or attribute of the entity described by the database. Records are also organised into tables that include information about relationships between its various fields. Although database is applied loosely to any collection of information in computer files, a database in the strict sense provides cross-referencing capabilities. Using keywords and various sorting commands, users can rapidly search, rearrange, group, and select the

fields in many records to retrieve or create reports on particular aggregates of data. (Encyclopedia Britannica, 2013)

MySQL

MySQL is an open source relational database management system (RDBMS) based on Structured Query Language (SQL). MySQL runs on virtually all platforms, including Linux, UNIX, and Windows. Although it can be used in a wide range of applications, MySQL is most often associated with web-based applications and online publishing and is an important component of an open source enterprise stack called LAMP. LAMP is a Web development platform that uses Linux as the operating system, Apache as the Web server, MySQL as the relational database management system and PHP as the object-oriented scripting language. (Suehring and Valade, 2013)

MySql is a great database management system and is is open source. The database server is very fast, reliable and easy to use. A large amount of MySQL software is available and it is very secure which was perfect for this project.

4.1.4 Framework

Bootstrap

Bootstrap is an open-source JavaScript framework developed by the team at Twitter. It is a combination of HTML, CSS, and JavaScript code designed to help build user interface components. Bootstrap was also programmed to support both HTML5 and CSS3. Originally created by a designer and a developer at Twitter, Bootstrap has become one of the most popular front-end frameworks and open source projects in the world.(Markle, 2015)

Bootstrap was chosen because it works well in all modern browsers. It uses mobile first approach which helps for making the site responsive. It is also lightweight which helps with loading times from the server.

4.1.5 Other

Typekit

Typekit is a service which allows subscribers to embed fonts into online documents. It allows designers and developers a subscription-based library of hosted, high-quality fonts to use on their websites. Typekit is available to the public and allows subscribers to get access under a single licensing agreement to the Typekit font library, which, as of April 2012, consists of more than 700 typefaces from a variety of foundries. The fonts are offered as a standalone service and as part of Adobe's Creative Cloud, The service uses the @font-face CSS property and JavaScript.[16] As a paying subscriber to Adobe Creative Cloud(Adobe.com, 2015), Typekit was be used to create the typography within the project.

INSTAGRAM API

Instagram API. This is the API that was used to pull in the photos to the website from the users accounts via a unique Hashtag. Why use The Instagram API? Instagram is a huge social media service with over 300 million monthly users. The API has a large amount of documentation which helped with the installation of the API. Instagram as a service works very well and works very well within this website. (Instagram, 2015)

GOOGLEMAPS

For the locations of the reception Google maps was used to display this information. Google maps allow you to mark a location and then save it it your account. This in formation can then be displayed by inserting an iFrame into your website. Users then click the map and can use this to plan and navigate their way to the destination. If opened on a mobile phone the Google maps will use your location and give you directions from wherever you are. This is a very good feature to have within the website. (Google Developers, 2015)

4.2 CHALLENGES

RISK ANALYSIS

During the build of the website there were quite a few risks involved. These risks had to be identified before the build stage, this allowed for a time line to be put in place in case for errors and development problems. The risk analysis table shows the relationship between the risk source, the probability of it failing, the impact it will have on the build, the areas it will impact and a mitigation response . See ***Figure 19*** for the risk analysis of Insta Wedding.

	Risk source		PROBABILITY			IMPACT			Result	IMPACT AREAS			Mitigation / Response plan	Status
			Low	Medium	High	Low	Medium	High		Cost	Schedule	Performance		
1	RSVP	Andrew M.			7			9	63			x	If RSVP does not function admin have no idea who will attend the wedding. This is a major failure of the website. Mitigation will be to reply via post. Not practical for an online response form	New
2	Admin Backend System	Andrew M.			7			9	63			x	Without backend system in place the RSVP form is useless and Admin have no way of controlling what comments get uploaded to their website. Major failure of websites feature. There is no mitigation for this.	New
3	Online Guestbook	Andrew M.			7			9	63			x	If online guestbook does not load then the problem is not of major concern as the impact does not affect thecore functionality of the website. Mitigation could be to send an email to the admin of the site.	New
4	Installing Instagram API	Andrew M.			7			9	63		x		Having little experience in the installation of API's there is a risk of it not working due to technical experience. If not successful try another API such as Flickr. This will have a negative impact on the build stage.	New
5	Build Time	Andrew M.			7			9	63		x		Build time, Project needs to be finished by May 1st. Time limit on build time. Mitigation make sure the important features are installed and working. Refer to Gantt chart to keep track of deadlines and milestones	New
6	Updateable Background Images	Andrew M.			7		5		35			x	As the website will already have a background image, the website will continue to do its function if the updateable function fails to be completed. The website will still work and this will not have a big impact on the functionality of the site.	New
7	API Instagram	Andrew M.	1					9	9			x	If API fails then no photographs will load into website from Instagram. Major failure of the websites main feature. There is no way to mitigate this.	New
8	Installing Google Maps API.	Andrew M.	2			2			4		x		Having experience in the use of Google Maps API the installation should not be a problem. If there is problems will have an impact on the build stage.	New
9	API Google Maps	Andrew M.	1			2			2			x	If API fails the information may be displayed in text format. Resulting in user still getting information.	New
10	JS Google Analytics	Andrew M.	1			1			1			x	Can cause page loading times to increase. If does not load will not cause any issues to user experience.	New
11	JS Smooth Scroll	Andrew M.	1			1			1			x	Can cause loading times to increase, If smooth scroll fails, site can still be viewed. Low impact fault.	New

Figure 19 Risk Analysis Table

INSTAGRAM API

One of the big challenges was to make use of the Instagram API. To incorporate this and get it working into the site was to prove a big challenge. It was also of high risk in the risk analysis table. This meant if it failed the results would be disastrous for the website. the mitigation for this was if it did not work to use another photo application API.

RSVP

Another notable challenge was to be able to create an online guestbook that would require a user of the website to be able to accept or decline the invitation online. This would then have to be stored in the MySQL database. The administrators of the website would then be able to view the back-end information and see who has accepted or declined the invitations. This would prove a difficult task as the RSVP information would have to be called from the database and then shown in a back-end system.

GUESTBOOK

Another notable challenge was the implementation of the online guestbook which allows users of the website to sign a guestbook by leaving there name or names (if couple) and leaving a message. Again this message would have to be stored in the database. In order for the message to appear on the website the site administrators would have to log into the back-end and approve the message. This task would prove difficult due to the fact that after calling the information from the database to the back-end, the information would then have to be sent to the front end and made viewable on the website.

UPDATABLE BACKGROUND IMAGES

Another high risk challenges was the creation of a feature that allows the administrators of the website to be able to change the background images of the Header and RSVP sections. This will gives the website that personal touch and allow the site admin to make the website more personal to suit their wedding colours and notable that their RSVP section matches that of their wedding invitations. This will require the ability for the site admin to store Images in the database that they might fancy on their website.

They will have a section in the back-end that allows them to select the image and it will automatically change the image on the front end of the website.

BACK-END SYSTEM

In order for all the above sections to have worked a back-end system had to be installed. This system would allow for the site admin to:

- View users reply of the RSVP form.
- View messages names and messages from the online guestbook.
- Approve messages from online guestbook.
- Delete messages from online guestbook.
- View Background and RSVP images.
- Select and change background images.

4.3 ACHIEVEMENTS.

All of the notable challenges were completed and implemented into the web site. Having a good plan in place to develop each section at a time (referring back to waterfall approach methodology) made this possible. Special time was given to each high priority function as these were key to the website functionality. The process was by no means easy, but good planning helped the development of these tasks.

4.3.1 Implementation of Instagram API

In order to display the results of the Instagram API on our webpage Ractive.js template was used. The Ractive.js template is what combines the JSON data object to a HTML view. See ***Figure 20***

```
<div class="col-sm-12">
  <body id='skrollr-body'>

  <div id="template-target">


</div>
```

Figure 20

This shows how the Ractive.js template is inserted into the HTML code. This is the section of the website that displays the Instagram pictures.

To make the Instagram API pull in the pictures we need a Client ID. (Instagram.com, 2015)This client ID is authenticated through the Instagram API developer site. Without this ID the API will fail to load. By using JavaScript we can call the API and send it to the template which holds all the necessary CSS to style our gallery section. See ***Figure 21***

```
/**
 * Get the Ractive Template
 */
$.get( 'templates/twitter-feed.rac').then( function ( template ) {
  /**
   * Initialize our Template
   */
    insta = new instagramFeed({
      el: 'template-target',
      template: template,
      clientID: 'fd883105667442275a3d68092d9c175d1',
      search: query,
      complete: infiniteScrollBinding
    });//Ractive init
});//Get Template
```

Figure 21 Instagram API Client ID

The successful installation of the Instagram API was a major achievement. This was one of the main features on the website that had a high importance on the requirements

specification. To get this feature working meant that the website was now serving its purpose.

The combination of the code in ***Figures 21 & 20*** will have the following impact on the website as shown below in ***Figure 22***

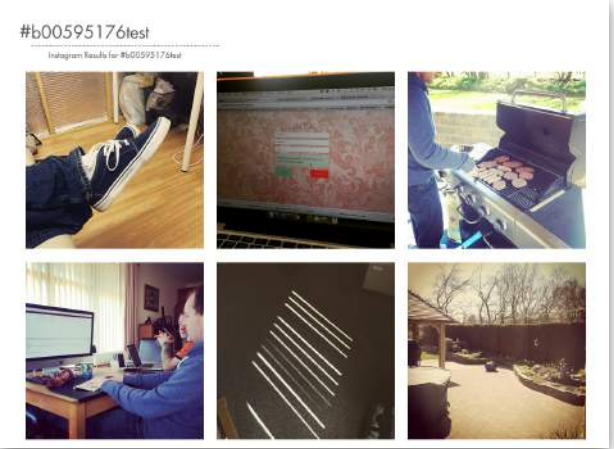


Figure 22

Integration of the Instagram API. Displayed by Ractive.JS template in grid view. This is styled by using the Instagram-feed.css.

The webpage needs to be set-up so that the photographs from Instagram load in automatically. This is done with the help of JavaScript. See ***Figure 23***

```
var instafeed = {};

//Check URL for search parameter.
query = (window.location.search.length ? window.location.search.slice(1) : 'b00595176test');
```

Figure 23

Here you can see where the JavaScript pulls in the unique hashtag unique to this website. This query is then searched on Instagram and the results are displayed on the webpage. This can be changed for each new website set-up.

INFINITE SCROLL

Another feature of the Instagram photo gallery is that it can be set to infinite scroll. this means that if there are lots and lots of photographs the page will load new images on

scroll as your search down the page. This is all dependant not he number of images pulled into the website. See ***Figure 24***

```
//Infinite Scroll Window Bindings.
var infiniteScrollBinding = function(){
  $(window).scroll(function(evt){
    //Calculate Window Values on every scroll event.
    var bod = $('body')[0];
    pageHeight = bod.offsetHeight;
    bottomScroll = window.scrollY + bod.clientHeight;
    distanceToBottom = pageHeight - bottomScroll;


  });
}
```

Figure 24

This function set the height at which the page will auto load new images into the website as the user scrolls down the page.

4.3.2 Implementation of RSVP

To link the RSVP form to the database requires the use of PHP. See ***Figure 25***

```
$errors = "";

$fname = $_POST['fname'];
$lname = $_POST['lname'];
$email = $_POST['email'];

$attending = $_POST['attending'];

include "dbconfig.php";
```

Figure 25

The first name, last name and email are required in order to successfully fill out the RSVP Form. If the user clicks attending the information will be sent to the database. The include is to access the database.

```
<?php

$server = "localhost";
$db = "instawedding";
$user = "antard";
$pass = "instawedding2015";

$con = mysqli_connect($server,$user,$pass,$db);

// Check connection
if (mysqli_connect_errno()) {
  echo "Failed to connect to MySQL: " . mysqli_connect_error();
}

?>
```

Figure 26 “dbconfig.php”

The database needs to have the config file set-up so that the information can be sent to it. This holds the relevant passwords and usernames to access the database.

If the user enters the wrong details they will get an error. So a PHP if statement had to be wrote in order to acquire the correct details of the user. See ***Figure 27***

```
if (!isset($fname) || $fname == "") {
  $errors .= "<li>Invalid First Name</li>";
}
if (!isset($lname) || $lname == "") {
  $errors .= "<li>Invalid Last Name</li>";
}
if (!isset($email) || $email == "" || !filter_var($email, FILTER_VALIDATE_EMAIL)) {
  $errors .= "<li>Invalid Email</li>";
}
if (!isset($attending) || $attending == "") {
  $errors .= "<li>Invalid Selection for Attendance</li>";
}
```

Figure 27 If Statement

On successful completion of the RSVP form the user will receive an email of thanks for completing the form. If attending a value of 1 sends a message of “looking forward to see you” and if not attending a value of 0 sends a message of “were sorry you cant make it” See ***Figure 28***

```
    if ($attending == 1) {
      $message = $fname.', thank you for accepting the invitation to our wedding.  We look forward to seeing you on the day.';
    }
    else if ($attending == 0) {
      $message = $fname.', thank you for responding to the invitation to our wedding.  We\'re sorry you can\'t make it, but we look forward to seeing you
    }

    $message .= "\r\n\r\nInstawedding";

    $headers = 'From: InstaWedding <info@instawedding.com>'."\r\n".
    'Reply-To: InstaWedding <info@instawedding.com>'."\r\n";
    @mail($email, 'Wedding RSVP Confirmation', $message, $headers);

    echo "success";
  }
  else {
    echo $errors;
  }
```

Figure 28 Success RSVP response.

By completing the RSVP form was another great success as it was of high importance on the list of requirement specifications. This was another milestone reached and one step closer to having a fully functional website.

4.3.3 Implementation of Guestbook

The online guestbook was another feature of high importance on the requirements specifications list. This feature was also built by using PHP. See ***Figure 29***

```php
<?php

$errors = "";

$name = $_POST['name'];
$message = $_POST['message'];

include "dbconfig.php";
```

Figure 29

Guestbook users require a name and a message in order to fill out the form. Again the the include file gives access to the database.

The guestbook also required an If statement so that the correct details could be added to the database and the relevant information obtained form the user. See ***Figure 30***

```php
if (!isset($name) || $name == "") {
  $errors .= "<li>Invalid Name</li>";
}
if (!isset($message) || $message == "") {
  $errors .= "<li>Invalid Message</li>";
}

if ($errors == "") {
  $query = "INSERT INTO guestbook (name, message) VALUES ('$name', '$message')";
  mysqli_query($con,$query);
  echo "success";
}
else {
  echo $errors;
}

?>
```

Figure 30 If Statement guestbook

With the guestbook section now working and adding our names and messages to the database another big milestone had been reached. The website functions were now starting to take shape and the website functionality improving.

4.3.5 Implementation of Back-end System

Administrators are the users of the back-end system and needed to be set-up within the database so that they are able to login and access the back-end system. So working inside of phpMyAdmin (contributors, 2015) the admin was set-up in the Insta Wedding

Database. The admin were given an id and required an email and password. So for this version of Insta Wedding the:

Username is: ***antard@instawedding.com***

Password is: ***instawedding2015***

To access the back-end with PHP and JavaScript there needed to be a process form to validate the access. See ***Figure 31***

```php
<?php
session_start();
include "dbconfig.php";
$email = $_POST['email'];
$password = $_POST['password'];

$key = '82B9E6DEF475376786B6CD3328783';
```

Figure 31

The login form requires the username and password.

Once the JavaScript query is passed the PHP calls admin.php. This will bring the user to the back-end system of the website. See ***Figure 32a and 32b***

```php
if ($row['password'] == $encrypted)
{
  $_SESSION['loggedin'] = 1;
  include 'admin.php';
```

Figure 32

Admin Login process in PHP

```
<script type="text/javascript">
$(document).ready(function(){
  $('input[type="text"], input[type="password"]').click(function(){
    $('#login-conf-row').empty();
  });
  $("#login-btn").click(function(){
    $.ajax({
      type: "POST",
      url: "login-process.php",
      data: $("#login-form").serialize()
    }).done(function(res) {
      if (res == 'fail') {
        $('#login-conf-row').html('<div class="alert alert-danger" role="alert">Invalid Login<button type="button" class="close" data-dismis
      }
      else {
        $('#content').html(res);
      }
    });
    return false;
  });
});
</script>
```

Figure 32b

When the button is clicked the JavaScript calls the login-process.php file which enables the user to login.

Within the back-end system the admin has the ability to view who replied via the RSVP form and have the choice to delete the response from the database. See ***Figure 33***

```php
<?php
$postid = $_POST['postid'];

include('dbconfig.php');

if (isset($postid) && $postid != "") {
  mysqli_query($con,"DELETE FROM rsvp WHERE id = '".$postid."'");
  echo "success";
}
else {
  echo "fail";
}
?>
```

Figure 33

PHP Database function that deletes RSVP response. JavaScript is used to call this from the admin section.

The reason for giving the admin access to delete the RSVP response is if a user makes a mistake and enters the wrong response leading to problems of who is attending the wedding. See ***Figure 34***

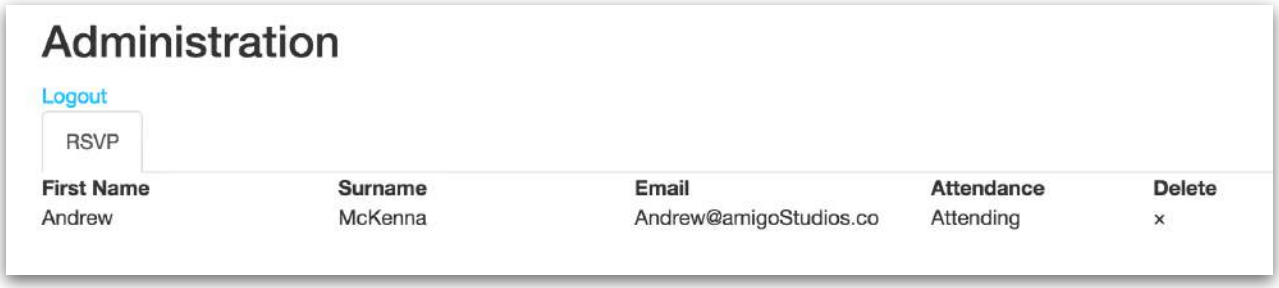


Figure 34

Back-end system viewing RSVP response

In ***Figure 33a the*** JavaScript function works by the admin clicking the delete button. On click they get the response “are you sure you want to delete” If confirmed the script calls the delete-rsvp.php file via the AJAX (W3schools.com, 2015) call to delete and then removes this RSVP response from the database.

```
$("#rsvp-table .delete").click(function(){
  var postid = $(this).closest("tr").data('id');
  var clicked = $(this);
  console.log(postid);
  if (confirm("Are you sure you wish to delete?")) {
    $.ajax({
      type: "POST",
      url: "delete-rsvp.php",
      data: { postid: postid }
    }).done(function(result) {
      if (result === "success") {
          $(clicked).closest("tr").remove();
      }
    });
  }
  return false;
});
```

Figure 35a

With the admin now having control to view and delete the RSVP the functionality was complete. The Admin then needed to be able to view the online guestbook and have the ability to approve and or delete the comments left for them.

To approve comments JavaScript and php function was drawn up. See ***Figure 36***

```
<?php
$postid = $_POST['postid'];

include('dbconfig.php');

if (isset($postid) && $postid != "") {
  mysqli_query($con,"UPDATE guestbook SET approved = !approved WHERE id = '".$postid."'");
  echo "success";
}
else {
  echo "fail";
}
?>
```

Figure 36a

PHP function to approve online guestbook Comments, using mysqli (Php.net, 2015) query Update. Once approved the comment get displayed in the website above the message form.

The JavaScript function lets the user delete and approve these comments.See ***Figure 36b***

```
$("#guestbook-table .delete").click(function(){
  var postid = $(this).closest("tr").data('id');
  var clicked = $(this);
  if (confirm("Are you sure you wish to delete?")) {
    $.ajax({
      type: "POST",
      url: "delete-guestbook.php",
      data: { postid: postid }
    }).done(function(result) {
      if (result === "success") {
          $(clicked).closest("tr").remove();
      }
    });
  }
  return false;
});
$("#guestbook-table .switch input").change(function(){
  var postid = $(this).closest("tr").data('id');
  var clicked = $(this);
  $.ajax({
    type: "POST",
    url: "approve-guestbook.php",
    data: { postid: postid }
  }).done(function(result) {
    }
  );
  return false;
});
});
</script>
```

Figure 36b

The JavaScript function created to delete guestbook comments and approve comment to be displayed on the website.

Delete comments PHP function. See ***Figure 37***

```
<?php
$postid = $_POST['postid'];

include('dbconfig.php');

if (isset($postid) && $postid != "") {
  mysqli_query($con,"DELETE FROM guestbook WHERE id = '".$postid."'");
  echo "success";
}
else {
  echo "fail";
}
?>
```

Figure 37

Delete guestbook comment script.

View of admin back-end system of the online guestbook tab. See ***Figure 38***

Figure 38

As you can see the admin can approve the comments left on the site. This function makes the website more user friendly and gives more control to the user. They now have the ability to approve, and delete comments for their website. The approved comments are then displayed on the website as shown in ***Figure 39***

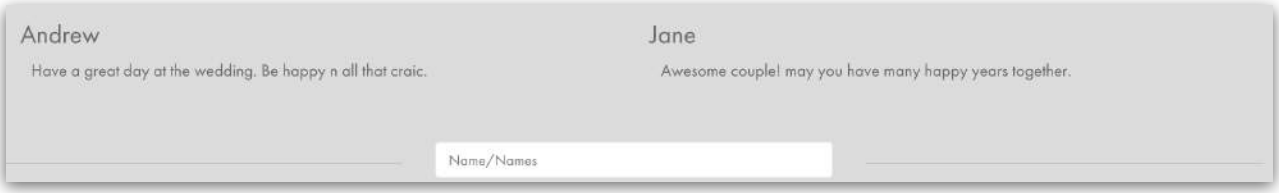


Figure 39

Comments that have been approved by the admin displayed onto the website. The non approved comments are not shown.

4.3.6 Implementation of Updatable background Images

This feature was one of medium risk to the functionality of the website but is a practical feature to personalise the website to the user. The database needed to be set-up to allow the storage of images which would be selected by the admin to display on the live website. A php script was created to set the image to the database via the back-end system. See ***Figure 40***

```php
<?php
$image_id = $_POST['image_id'];
$image_url = $_POST['image_url'];

include('dbconfig.php');

if (isset($image_url) && $image_url != "") {
  mysqli_query($con,"UPDATE images SET image_url = '".$image_url."' WHERE id = '".$image_id."'");
  echo "success";
}
else {
  echo "fail";
}
?>
```

Figure 40

PHP image to database.

JavaScript was used to let the admin pick an image form the database which would then be displayed on the live website. But first the back-end had to be set-up to allow the user to select the images. See ***Figure 41***

```javascript
$('#admin-tabs a').click(function (e) {
  e.preventDefault()
  $(this).tab('show')
});


$('.img-select').click(function () {
  var val = $(this).attr('src');
  var imageId = $(this).closest('.panel').data('image-id');
  console.log(val);
  console.log(imageId);
  $.ajax({
    url: 'image-save.php',
    type: 'POST',
    data: {
      image_url: val,
      image_id: imageId
    }
```

Figure 41

To create the back-end image tab we need to pull the images from the database stored within the image section. Were the id = 1 the images are shown in the HTML format as shown in ***Figure 42***

```php
<div class="image-select-container">
  <?php

    include "dbconfig.php";

    $query = "SELECT * FROM images WHERE id = 1";
    $result = mysqli_query($con,$query);

    $row = mysqli_fetch_array($result);

    $files = glob('../img/header/*.{jpg,jpeg,png,gif}', GLOB_BRACE);

    foreach($files as $i => $file) {

      if ($file == $row['image_url'])
      {
        $active = true;
      }
      else {
        $active = false;
      }

      ?>
        <input type="radio" id="imgSel-<?php echo $i; ?>" name="header_img" value="<?php echo $file; ?>" <?php if ($active) { echo 'checke
        <label for="imgSel-<?php echo $i; ?>">
            <img class="img-select" width="150" src="<?php echo $file; ?>" alt="thumbnail" />
        </label>

        <?php
    }

  ?>
</div>
```

Figure 42

Admin View of images pulled from database.

In order for the admin to set the background image a JavaScript function was created to make the selected image appear on the website. This function would have to pull the image form the database and set it in the correct position on the webpage. See ***Figure 43***

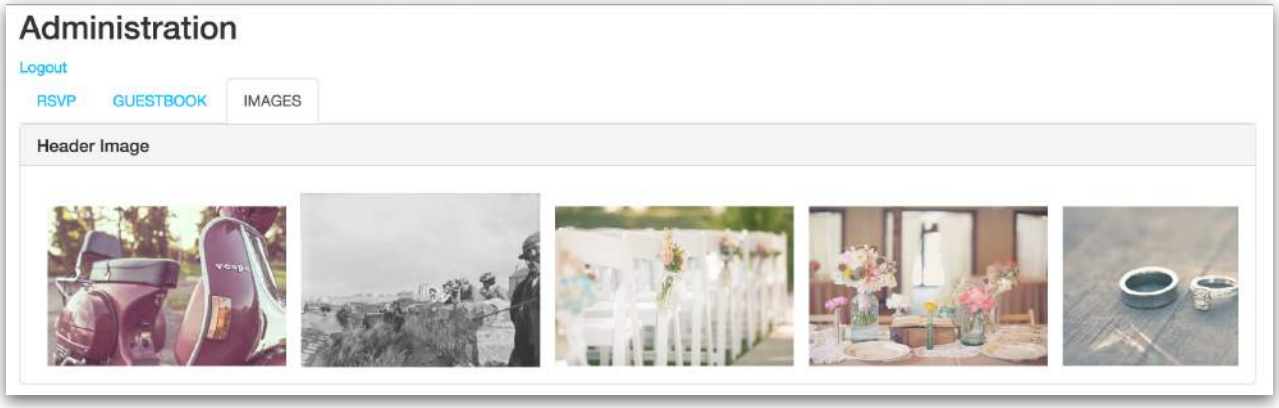


Figure 43

When the admin user clicks the image, the JavaScript function finds it source and image id. It then uses AJAX to pull the image from the database via the image-save.php. The image is then posted to the relevant location on the index.html page. See ***Figure 44***

```
style="background-image: url('<?php echo substr($images[0]['image_url'], 3);?>');">
```

Figure 44

The image is then inserted into the location on the HTML page. This same process happens for the RSVP section.

5. TESTING

5.1 Approach

There are different ways of testing websites and applications. Different applications may require different testing methods. For Insta Wedding there was a range of tests carried out to make sure the functional requirements were met. They are as follows:

- Functionality testing.
- Usability testing.
- Interface testing
- Compatibility testing
- Performance testing
- Security testing

5.2 Process

The testing carried out on Insta Wedding was as follows.

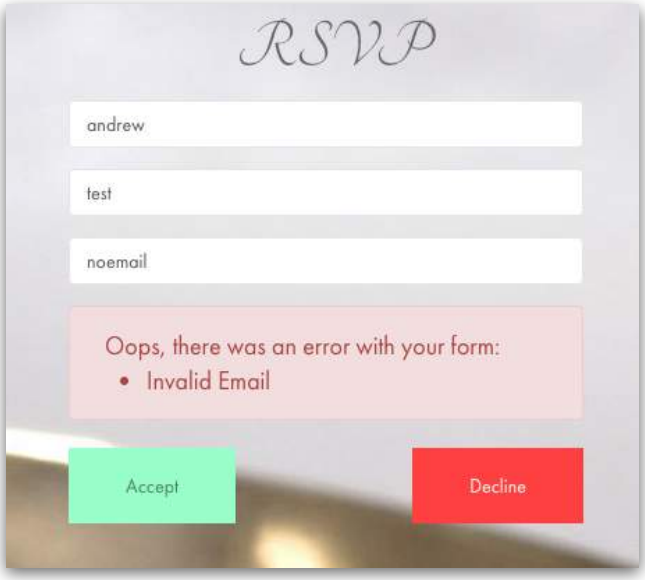
5.2.1 Functionality Testing

LINKS

To test the functionality of Insta Wedding all the links on the website were checked to make sure that they were working and going to the correct url. Internal links were also checked. This included the test of links navigating within the site as it is a one page style website.

FORMS

Forms are a very important part of this website. They are crucial to get information from the user. Validations in each field were tested to make sure users entered the correct details. This meant making sure users had entered correct emails and that the admin had entered the correct details to login. See ***Figure 45 & 46***



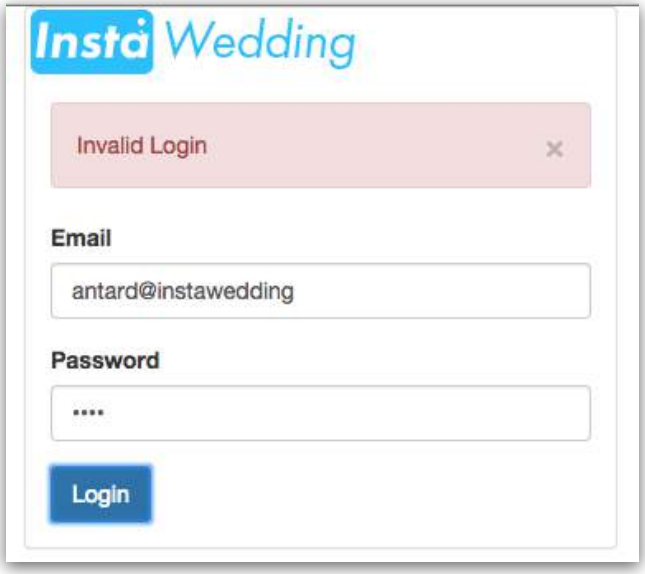


Figure 45

Figure 46

Forms are validated correctly which means the users will get the correct information from their users.

DATABASE TESTING

All the database functions needed to be tested to ensure that each of the functions worked correctly. This meant going through each of the functions and testing weather information submitted was viewable in the back-end. If it was viewable in the back-end system it had been submitted tot he database correctly. Once the site was live on the server all tests were carried out inch of the functions to ensure it was working correctly.

5.2.2 Usability Testing

NAVIGATION

The website should be easy to use. This meant that the page should scroll when the user scrolls via a trackpad or a mouse. Buttons were tested to make sure they worked as buttons.

CONTENT

Content on the website is logical and easy to understand. The website was checked for spelling errors. Colours were not made too dark as to provide the user with an optimal viewing experience. Images have been made to their proper sizes and optimised for the web viewing. Anchors within the site were all tested to make sure they take you to the correct location.

5.2.3 Compatibly Testing

With compatibility testing there was a small process that the website was put through. the website has to work across multiple browsers and across multiple platforms.

BROWSER COMPATIBILITY

This is one of the most important aspects of the website testing. There are many browsers out there and so many variations of each browser. It is not impossible to test for them all, but there is a limit at which you need to stop your testing. Older browsers may not be able to handle some of the technology used in the Insta Wedding website. another factor is that browsers handle the use of jQuery and JavaScript differently, they may render details in different ways. Also as time play as a major factor in this project the browser will only be tested for the major providers.

Insta wedding has been tested in the following websites versions:

- Google Chrome Version 42.0.2311.90 (Google.com, 2015)
- Safari Version 8.0.5 (Apple, 2015)
- Mozilla firefox 37.0.2 (Mozilla, 2015)

- Opera 29.0.1795.47 (Opera.com, 2015)
- Internet Explorer 11.0.18 (windows.microsoft.com, 2015)

All the browsers tested here currently support all the features that are built into the Insta Wedding website. There were a few issues with Typekit not loading the fonts in correctly on Internet Explorer but the core function of the website performed.

OS COMPATIBILITY

The main feature here was to test whether the API would be called on both OSX (Apple, 2015) and Windows XP(windows.microsoft.com, 2015) . Having tested the IE on a windows machine the API worked well on both systems.

MOBILE

For mobile testing an iPhone 5s (Apple Store (UK), 2015) was used. All features of the website were to be tested on this. With the results being successful in all fields. Users of the website were able to fill in the RSVP form, leave messages and view the Insta Gallery. Google maps API works very well on the iPhone.

From the admin side of things the admin were successfully able to login and perform all the actions that they can do in the back-end. View RSVP replies, delete RSVP replies, view guestbook comments, delete guestbook comments, approve guestbook comments, select the images to be used as backgrounds for header and RSVP section.

5.2.3 Performance testing

The website needs to perform live on the server. If it is too slow users will not want to engage in the website and it will fail. For the performance test Webpage Test (Meenan, 2015) was used. You can run simple tests or perform advanced testing including multi-step transactions, video capture, content blocking and much more.The results will provide rich diagnostic information including resource loading waterfall charts, Page Speed optimisation checks and suggestions for improvements.The tests show how the website was built over stages and clearly shows the methodology used is waterfall. See Appendix E for performance test results.

5.3 Results

Results of testing against the high priority functional requirements.

ADMIN LOGIN:

The admin need to have the ability to login.

2	Functional	H	The user will be prompted to sign into the backend of the website.	If the user already has an account, they do not need to register again.	Users are able to successfully submit a log in form.	1	Admin

FIGURE RESULT: SUCCESS

WEBSITE VALIDATION:

The website will validate any forms to ensure correct data is stored.

4	Functional	H	The website will validate the sign in form.	The website must sign in the correct user based on data input.	Users data passes all checks and registration successful or error returned.	2	Admin

FIGURE RESULT: SUCCESS

USER GUESTBOOK SIGN:

Any user will be able to sign the guestbook.

9	Functional	H	The user will be prompted to sign the guest book.	Every user will have the option to sign the guest book.	User are able to sign the guest book successfully.	6	Admin

FIGURE RESULT: SUCCESS

UNIQUE HASHTAG SYNC:

Any user will be able to sync their Instagram photos via a unique hashtag.

12	Functional	H	The user will be able to add photos to website via a Hastag.	Users must use the hashtag associated with the site to upload.	User can successfully sync photograph to website.	7	Admin Guests

FIGURE RESULT: SUCCESS

ADMIN MUST BE EASY TO USE:

Admin back-end dashboard must be easy to use:

16	Non-Functional	H	The website must be easy to admin.	Users input needs to be low.	Admin spend little time in backend system.	2	Admin

FIGURE RESULT: SUCCESS

5.4 User Testing Survey

To get some feedback on Insta Wedding it was decided to run a survey Survey. Using Survey monkey (Surveymonkey.com, 2015) questions can be set to ask people to review your website. Here we have the survey used to ask people to review the site. The survey focused on visual appeal, recommendation of the website, ease of use and if the product was available would they buy it. The survey was sent out to close family and colleagues. See ***Figure 47***

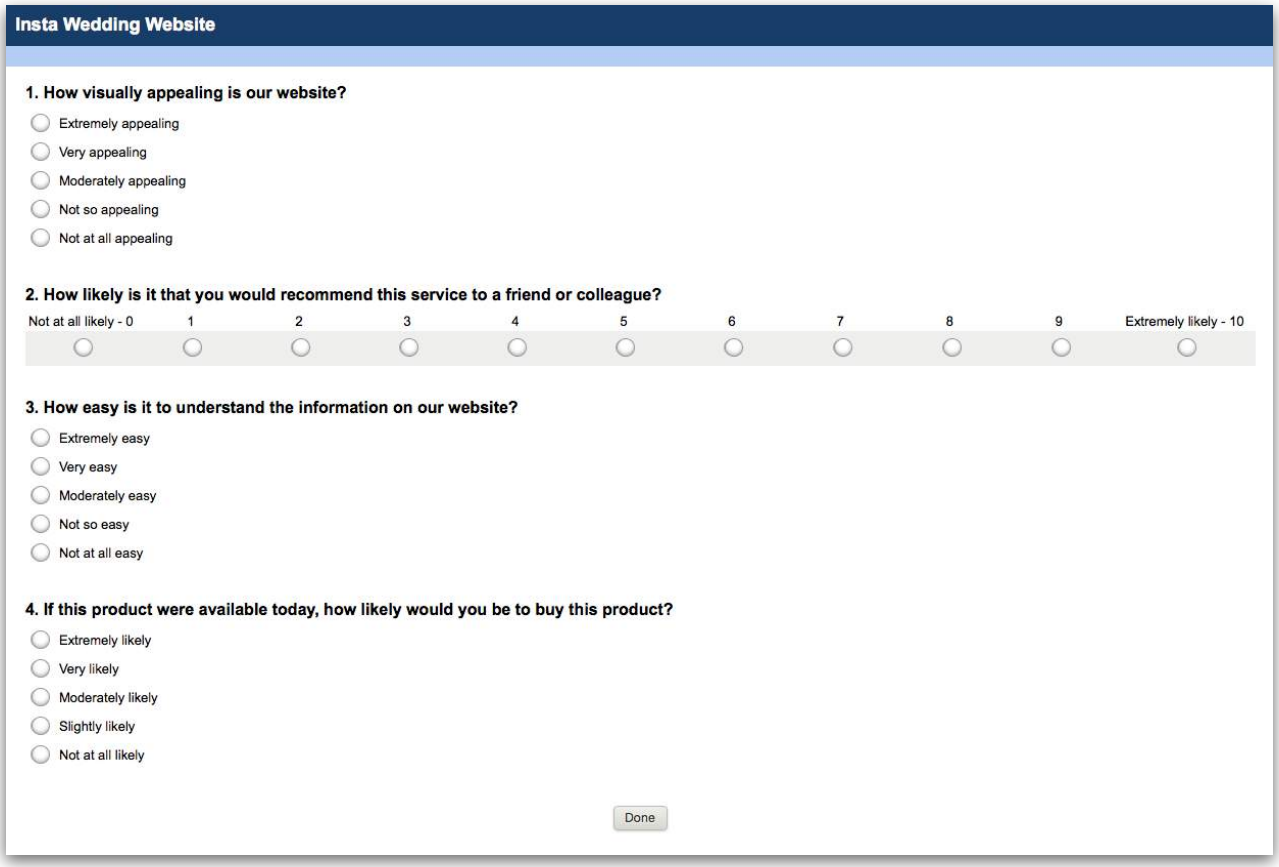


Figure 47 Survey Monkey Insta Wedding

The questions were as follows.

1. How visually appealing is our website?

2. How likely is it that you would recommend this service to a friend or colleague?
3. How easy is it to understand the information on our website?
4. If this product were available today, how likely would you be to buy this product?

See the results of the survey in Evaluation Section of report.

6. EVALUATION

6.1 Survey Results

Out of 12 people surveyed the results are as follows.

HOW VISUALLY APPEALING IS THE WEBSITE? SEE FIGURE 48

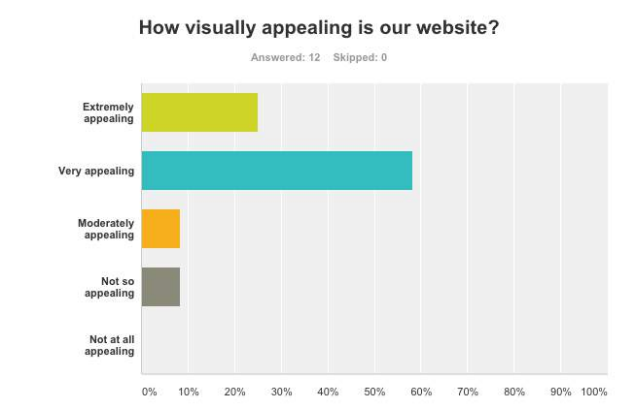


Figure 48

The results show that the majority of people thought that the website was either very or extremely appealing. Although one thought it was not so appealing and another only moderately appealing.

These results show that the website is visually appealing. This was a low level requirement of the website.

HOW LIKELY IS IT THAT YOU WOULD RECOMMEND THIS SERVICE TO A FRIEND OR COLLEAGUE? SEE FIGURE 49

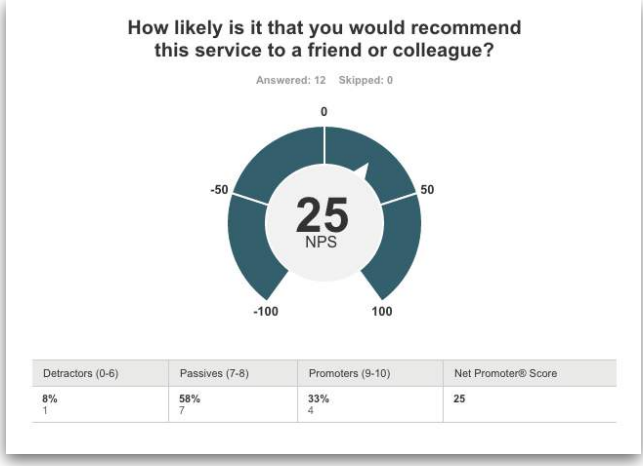


Figure 49

The results show that 58% of people would be passive in recommending the site to their friends or colleagues. They also show that 33% would be promoters of the website to their friends and colleagues.

HOW EASY IS IT TO UNDERSTAND THE INFORMATION ON OUR WEBSITE? SEE FIGURE 50

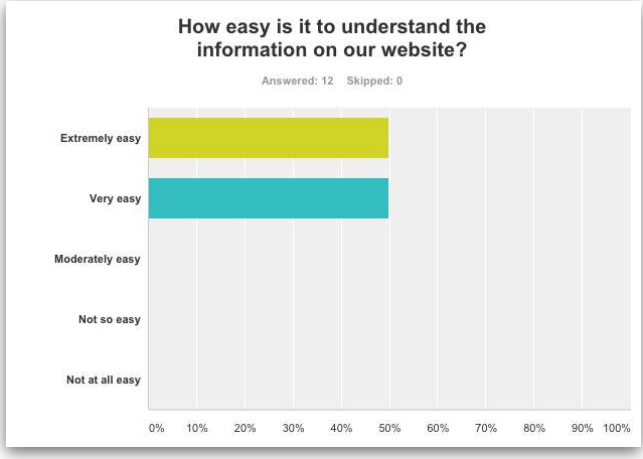


Figure 50

The results show that everyone thought that the information on the website was easy to understand.

Another low level requirement was to make the website easy to read and understand. All the people surveyed agreed that this was the case.

IF THIS PRODUCT WERE AVAILABLE TODAY, HOW LIKELY WOULD YOU BE TO BUY THIS PRODUCT? SEE FIGURE 51

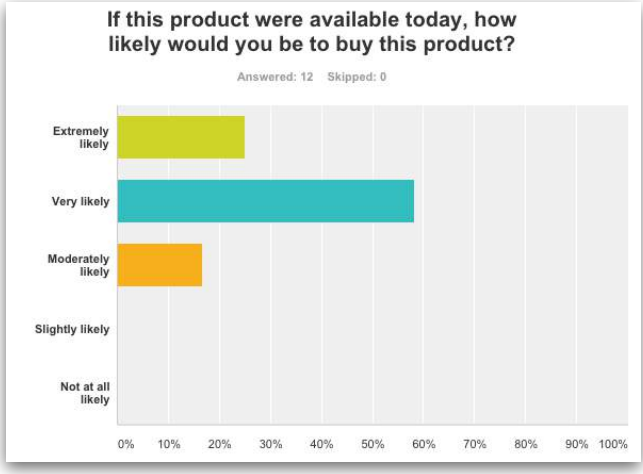


Figure 51

Most people would purchase the service if it were available today.

This is a good insight into the effect that the website has on people. Although it is only a very small survey it is still none the less a rough idea of how people are viewing it. Result may differ as the numbers who take the survey increase.

6.2 Project Outcomes

Insta Wedding has been a great project to work on over the last year. The project set many goals and milestones with the majority of these being reached. All the high priority functions were created succesfully. The project links the divide between social media photographs and offers a place to link an events photographs into one space on the internet.

Users of Insta Wedding can view important information about the wedding. They are able to view the reception details and find the best travel options via the Google maps API. Users have the ability to reply to a wedding invitation via the online RSVP form.

Users can also leave messages for the couple through the online guestbook. This is a very useful tool for people who are located in different countries to the wedding couple and cannot make the wedding.

The website works both on desktop and is fully functional via a mobile device to ensure a great user experience.

Administrators of the site have the ability to login to the website. In the back-end dashboard they can view all the RSVP replies and see whether a person is attending or not.

They have the ability to moderate the comments on their website. They can also update the RSVP and background header image to suit their needs as they please.

The project outcomes meet the needs of the high priority functional requirements.

7. CONCLUSION

7.1 Summary

Insta Wedding has been a tough but enjoyable experience. There have been many challenges over the course of the project. The inclusion of APIs from both Google and Instagram were challenges in themselves but these challenges were foreseen with aid of careful planning and with the creation of functional prototype. Delving deeper into PHP and JavaScript has given a much better understanding of these technologies and how the work with each other. Many new skills have been developed while developing this project. A better understanding of how API's authenticate their users for development. The use of 6 up was a new experience, a simple but effective method for development that gave this project a better user experience.

7.2 Reflection

Upon reflection the project ran smoothly over the course of the last year. Meetings with mentors and engaging with the group helped keep the idea fresh and develop it into what it is today. The continual use of Gantt (Gantt.com, 2015) charts and Teamwork PM helped with this schedule. One major factor was the development of the functional prototype, which once built once was much easier to develop into the main website.

Although the project ran smoothly there where a few requirements that did not get built into the project. This was due to the scope of the project being a wee bit too high. The requirements that were not met were not of high priority but it still reflects on the functionality of the website. The website is not perfect, there are a few issues that will need to be tidied up if the project is to be developed further.

More time spent on development in the first semester may have presented the opportunity to build the website with all its functional requirements. Again in semester two less time working on projects outside of the University (Ulster.ac.uk, 2015) may have led to a much more robust system although running a full time business (Studios, 2015)

and attending to clients needs has definitely impacted on the project, with less free time available the low priority functional requirements took a bit of a back seat to make sure that the high priority requirements were met. But all is not lost as development will be sure to continue with Insta Wedding.

Coming from a background in design, this project involved stepping into the role of a lead developer and al the roles associated with project management. The process was a fully engaging one and has had a profound impact on my understanding of the full process in web development.

7.3 Future

BACK-END SYSTEM AND RSVP FORM

In order to make the website more functional the RSVP form could require more information from the guests. For instance in the RSVP form if a user is attending they could fill out a further form such as:

- Are they bringing a guest with them?
- Any special dietary requirements. (allergies etc)?
- Do they need any help with disabilities?
- Do they require information to stay at the Hotel Reception?
- Request a song for the DJ/ band?
- Would they like professional photos taken of them on the day?

These questions would then have to be implemented to the database and appended to the back-end system. For the admin they will have much more information about their guests and therefore reduce the need for more paper (go green! this is the age of paperless systems). This set up will give the wedding couple a place to store all their information and not lose it.

CMS

Over the course of the project many new ideas have came to flourish. There is now the opportunity to take the project to the next level. Having built in a function that allows the site administrators to change the background images the idea has evolved to make the whole site into a wedding CMS (Techterms.com, 2015).

There are many CMS sites out there with a few focusing on weddings but this CMS would include the Insta Wedding feature. It would also be very user friendly and keep the idea really simple. Users of the site would to be able to update all images within the site and pick multiple themes and background selections. This could be implemented slowly and make small changes to the website at a time.

The future could prove quite a lucrative investment with different payment plans in place to capitalise on the idea.

MODERATION

At the moment there is no way to filter the Instagram pictures that are loaded into the website. This means that potentially unwanted pictures may be loaded into the website. In the future system ideally the site admin will receive the pictures to be stored into a database and give them the chance to moderate and approve the photos that filter into the website. It's not an ideal set-up at the moment but the idea is there to be explored for future use.

EVENTS

Currently the idea focuses on weddings. But the idea of the Instagram unique hashtag could apply to any event. For instance a classic car show may want its visitors use a unique hashtag to be able to display all the lovely photographs directly into their website.

Music festivals could use the unique hashtag to create a large gallery of events over the course of a weekend. The potential to develop the idea into a tangible business model is very strong.

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9. APPENDICES

Appendix A

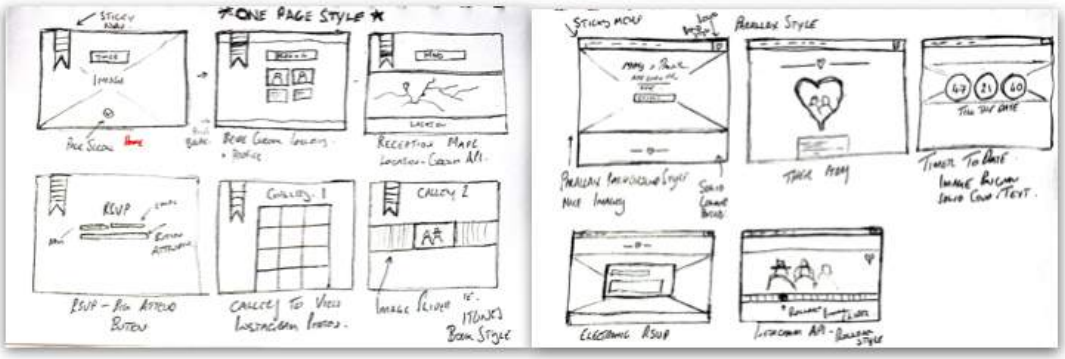
Functional Requirements Specifications

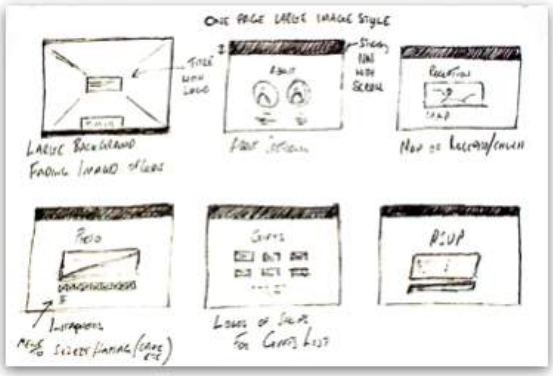
ID	TYPE	PRIORITY	DESCRIPTION	RATIONALE	FIT CRITERION	DEPENDANCIES	USER
1	Functional		The user will be prompted to sign up to the website.	Every user must have an account to perform any actions.	Users are able to successfully submit register form.		Admin
2	Functional	H	The user will be prompted to sign into the backend of the website.	If the user already has an account, they do not need to register again.	Users are able to successfully submit a log in form.	1	Admin
3	Functional	H	The website will validate the registration form.	Limit fake or duplicate accounts, ensure valid emails and information	Users data passes all checks and registration successful or error returned.	1	Admin
4	Functional	H	The website will validate the sign in form.	The website must sign in the correct user based on data input.	Users data passes all checks and registration successful or error returned.	2	Admin
5	Functional	L	The website will allow users to retrieve forgotten passwords.	To avoid loss of users.	Users can successfully reset their passwords.	1	Admin
6	Functional	L	The user will be prompted to sign up to the Insta Wedding Feature.	Every user must have an account to perform any actions.	Users are able to successfully submit register form.		Guest
7	Functional	L	The user will be prompted to link their Instagram account.	Every user must have an Instagram account to be able to upload.	Users are able to successfully upload pictures.	6	Guest

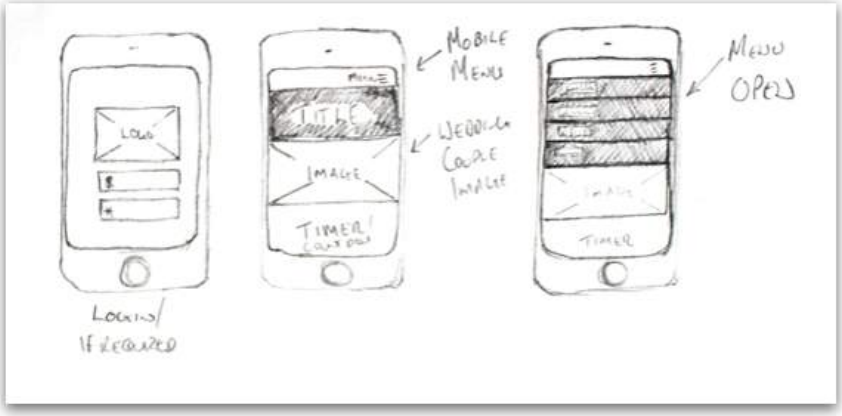
8	Functional	L	The user will be able to moderate pictures uploaded	Every user must have an account to perform any actions.	Users are able to successfully submit register form.	£	7	Admin
9	Functional	H	The user will be prompted to sign the guest book.	Every user will have the option to sign the guest book.	User are able to sign the guest book successfully.		6	Admin
10	Functional	H	The user will be able to moderate the guestbook comments.	In order for comments to be seen on the website the admin must approve.	User can upload comments to website.		9	Admin
11	Functional	L	The user will be prompted to sign the attendance log.	In order to use the Insta Wedding feature users must attend the wedding.	Users can sign up to Insta Wedding.		6	Admin
12	Functional	H	The user will be able to add photos to website via a Hastag.	Users must use the hashtag associated with the site to upload.	User can successfully sync photograph to website.		7	Admin Guests
13	Functional	M	User can moderate the photos synced to the website.	Users have choice to moderate photos that are synced to website.	Upon moderation Photos are successfully synced to website for display.		12	Admin
14	Non-Functional	L	The website needs to be attractive.	Good looking websites are better than non good looking websites.	Users will use it more if it is attractive.			
15	Non-Functional	H	The application must be easy to use.	To provide a good experience users must be able to use it.	Users can use the application.			
16	Non-Functional	H	The website must be easy to admin.	Users input needs to be low.	Admin spend little time in backend system.		2	Admin
17	Non-Functional	H	The website must be fully functional on all modern browsers.	Users do not all use the same broswer.	Website works on all major browsers.			

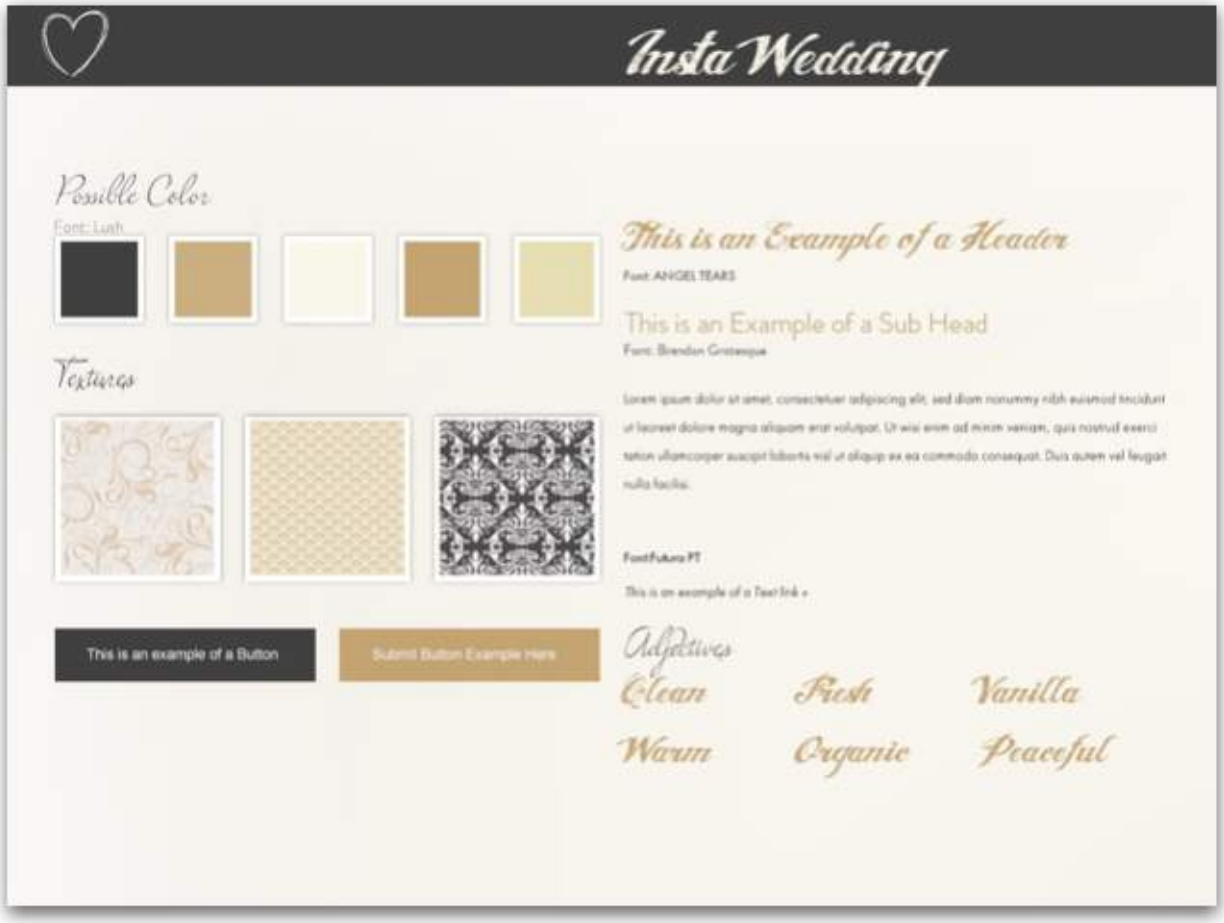
Appendix B

Initial Paper Visuals.



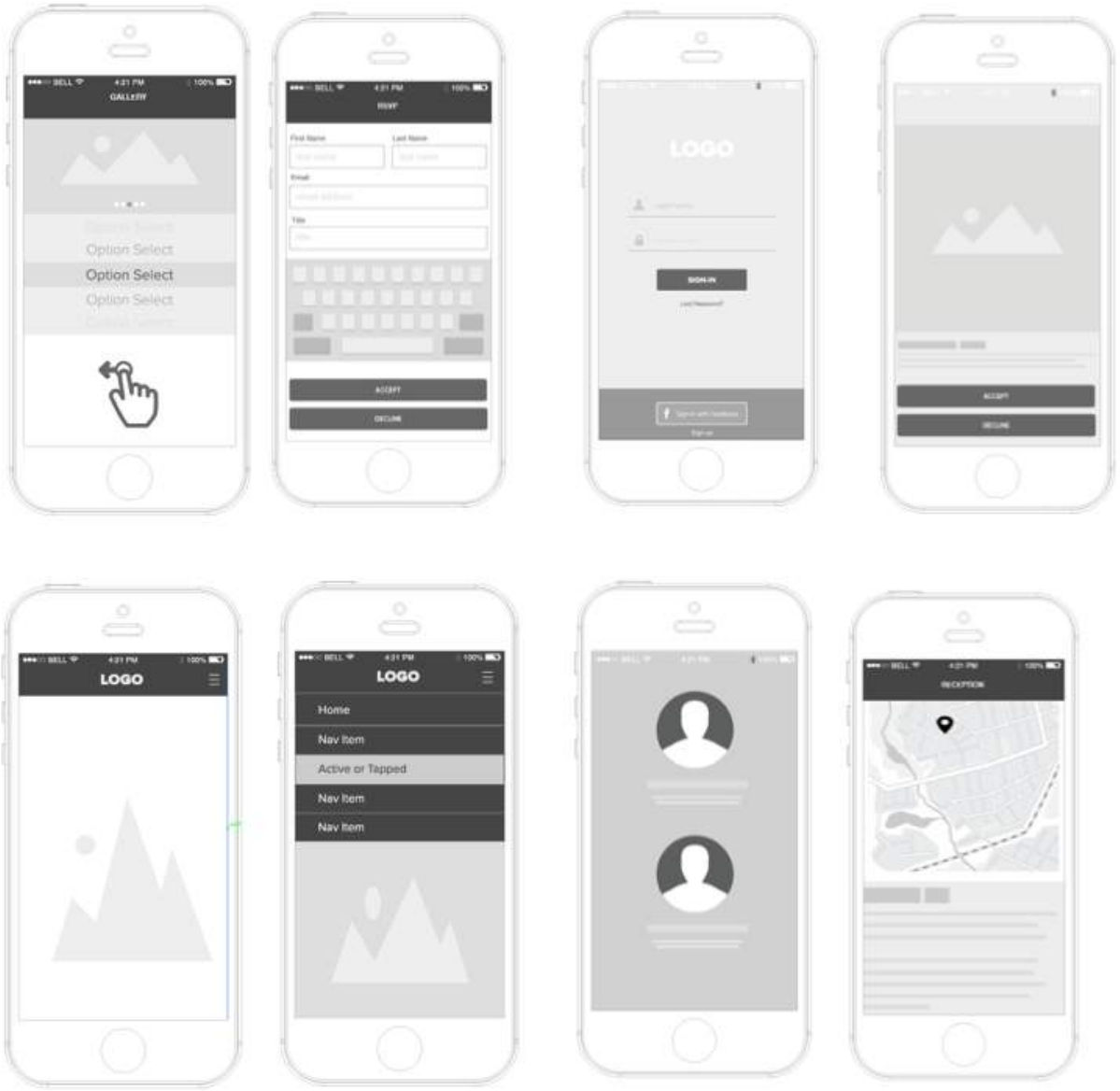


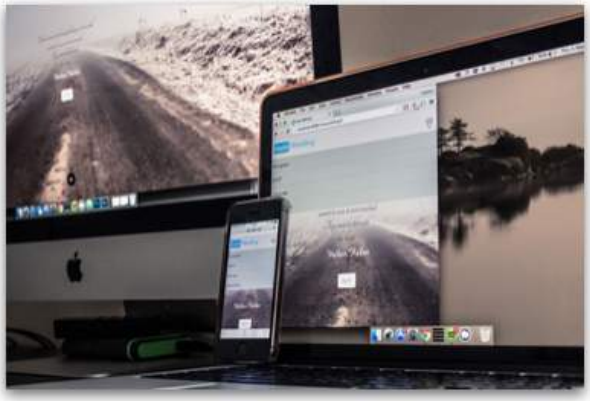
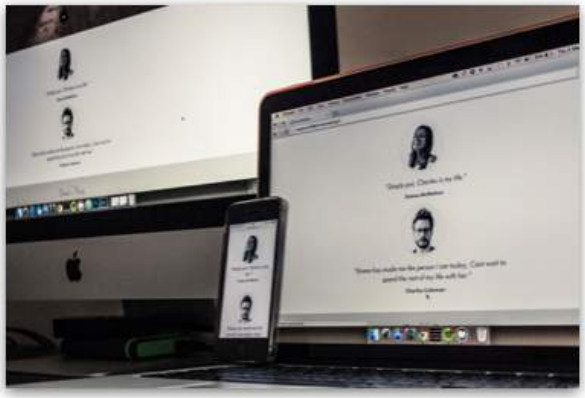
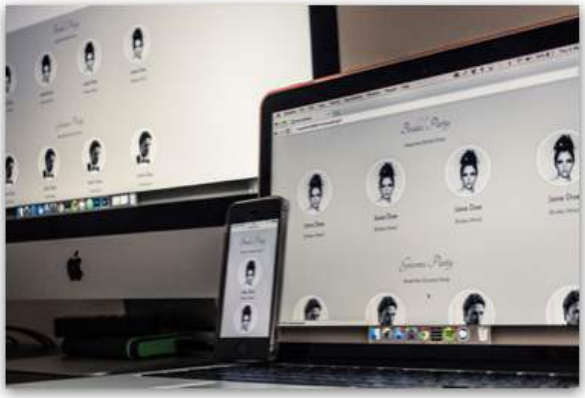


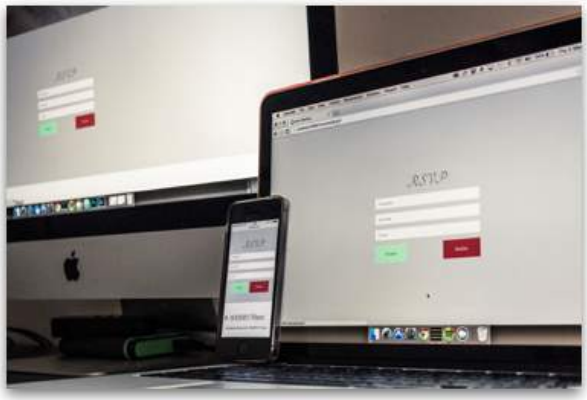
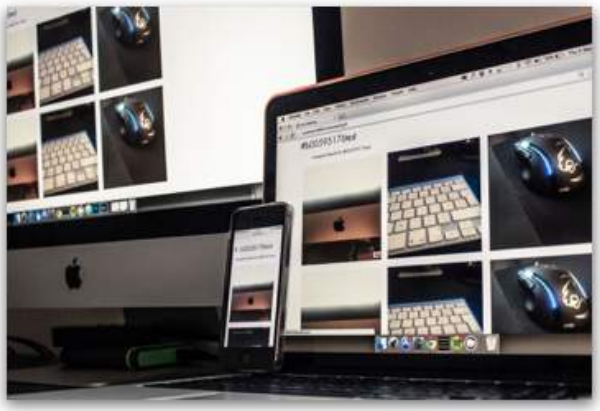

Insta Wedding
Possible Color
Font: Lush
This is an Example of a Header
Font: ANGEL TEARS
This is an Example of a Sub Head
Font: Brendon Grotesque
Textures
This is an example of a Button
Adjectives
Clean
Fresh
Vanilla
Warm
Organic
Peaceful

Appendix C

Refined Visuals & Mobile Wireframes


Option Select
Option Select
Option Select
LOGO
SIGN-IN
ACCEPT
DECLINE
LOGO
Home
Nav Item
Active or Tapped
Nav Item
Nav Item


Appendix D

Brand Guidelines


Logo, Colour & Type Specifications for
Prepared by
Andrew McKenna
Brand Logo Sheet
Insta Wedding
Insta Wedding
Insta Wedding
Insta Wedding
Insta Wedding


Logo, Colour & Type Specifications for
Prepared by
Brand Logo Sheet
Insta Wedding
Insta Wedding
Insta Wedding
Insta Wedding
Insta Wedding

Logo, Colour & Type Specifications for Prepared by

Logo Clear Space

Grey padding indicates the logo clear space.
An area where other elements must not encrouch.

Logo, Colour & Type Specifications for Prepared by

Logo Typeface

abcdefghijklmnopqrstuvwxyz

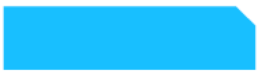
abcdefghijklmnopqrstuvwxyz

ABCDEFGHIJKLMNOPQRSTUVWXYZ

Futura PT Heavy Oblique

Futura PT Book Oblique

Brand Colours



Insta Blue
#19bfff

Insta White
#ffffff

Insta Black
#000000

Prohibited Logo Manipulations

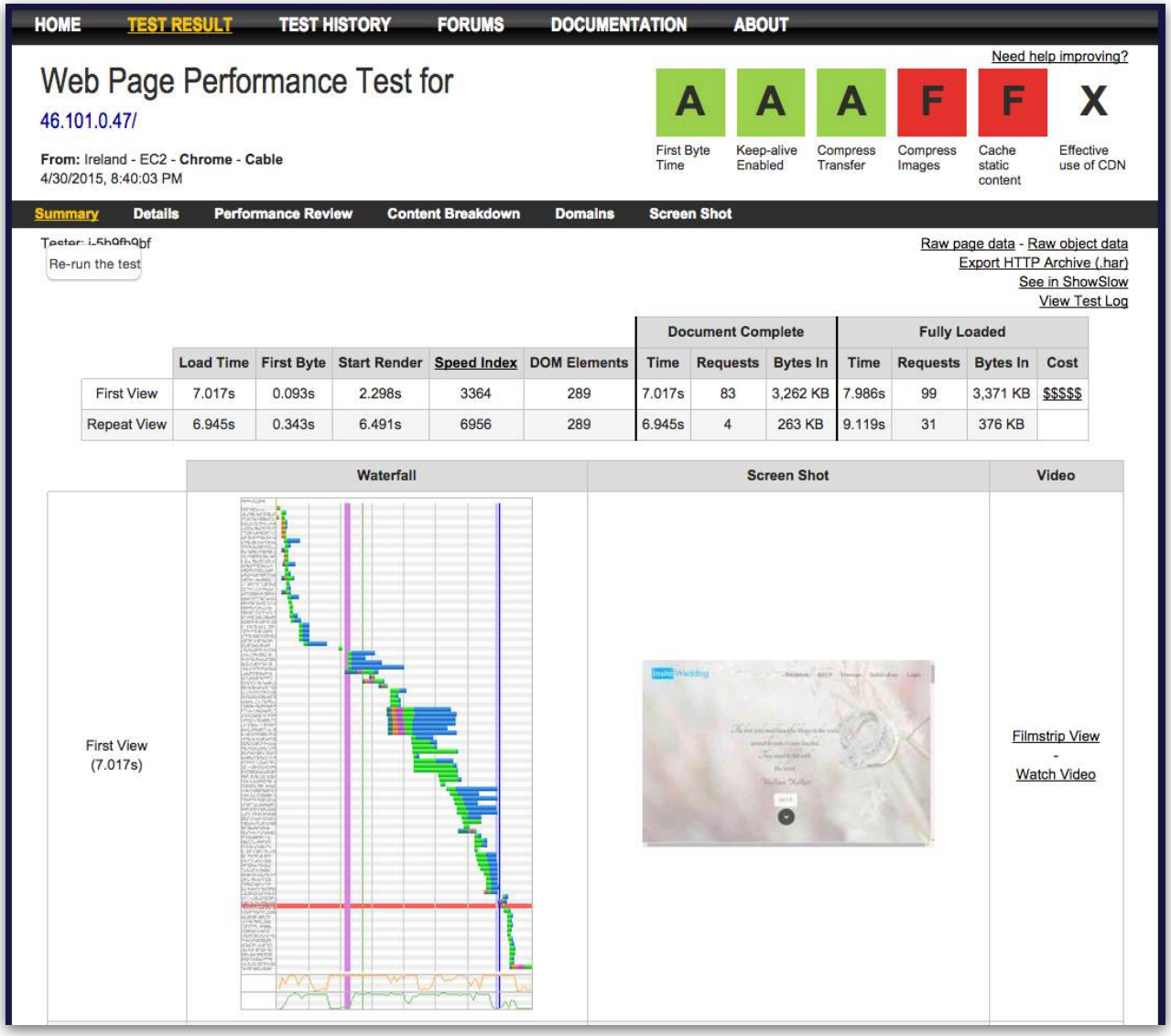
Never use another font.

Don't expand, stretch or squash.

Don't use unspecified colours.

Appendix E

Website Performance Test Results



HOME | TEST RESULT | TEST HISTORY | FORUMS | DOCUMENTATION | ABOUT

Need help improving?

Web Page Performance Test for
46.101.0.47/

From: Ireland - EC2 - Chrome - Cable
4/30/2015, 8:40:03 PM

A	A	A	F	F	X
First Byte Time	Keep-alive Enabled	Compress Transfer	Compress Images	Cache static content	Effective use of CDN

Summary | Details | Performance Review | Content Breakdown | Domains | Screen Shot

Tester: i-5b9fb9bf
Re-run the test

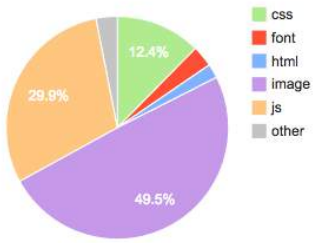
Raw page data - Raw object data
Export HTTP Archive (.har)
See in ShowSlow
View Test Log

	Load Time	First Byte	Start Render	Speed Index	DOM Elements	Document Complete Time	Document Complete Requests	Document Complete Bytes In	Fully Loaded Time	Fully Loaded Requests	Fully Loaded Bytes In	Fully Loaded Cost
First View	7.017s	0.093s	2.298s	3364	289	7.017s	83	3,262 KB	7.986s	99	3,371 KB	$$$$$
Repeat View	6.945s	0.343s	6.491s	6956	289	6.945s	4	263 KB	9.119s	31	376 KB	

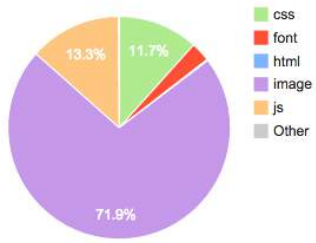
	Waterfall	Screen Shot	Video
First View (7.017s)			Filmstrip View - Watch Video

Content breakdown by MIME type (First View)

Requests



Bytes

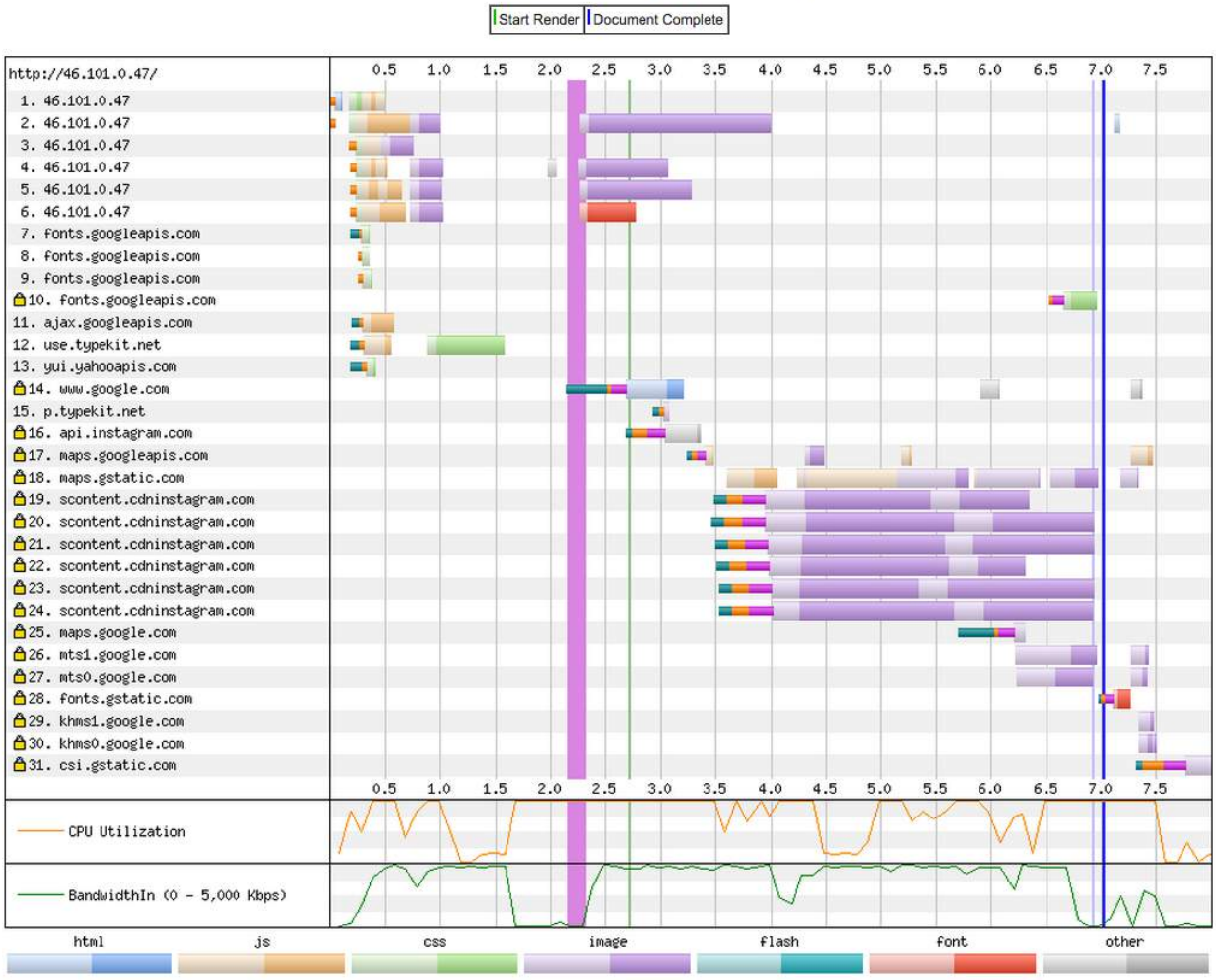


MIME Type	Requests
image	48
js	29
css	12
font	3
other	3
html	2
flash	0

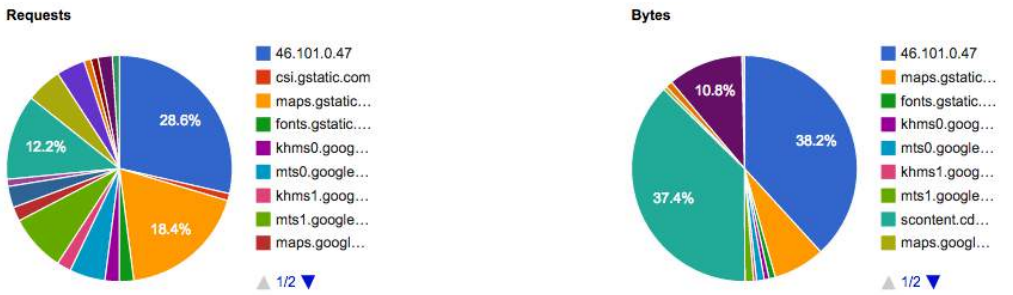
MIME Type	Bytes
image	2397855
js	444929
css	388802
font	95279
html	5621
other	3527
flash	0

Connection View (First View)

Connection View (First View)



Content breakdown by domain (First View)



Domain	Requests
46.101.0.47	28
maps.gstatic.com	18
scontent.cdninstagram.com	12
mts1.google.com	8
mts0.google.com	5
maps.googleapis.com	5
fonts.googleapis.com	4
www.google.com	3
fonts.gstatic.com	2
khms0.google.com	2
khms1.google.com	2
maps.google.com	2
use.typekit.net	2
csi.gstatic.com	1
api.instagram.com	1
ajax.googleapis.com	1
yui.yahooapis.com	1
p.typekit.net	1

Domain	Bytes
46.101.0.47	1275854
scontent.cdninstagram.com	1249894
use.typekit.net	360826
maps.gstatic.com	247153
mts1.google.com	40727
mts0.google.com	36608
ajax.googleapis.com	33302
fonts.gstatic.com	29527
khms0.google.com	23465
maps.googleapis.com	16445
khms1.google.com	14522
fonts.googleapis.com	3917
www.google.com	2912
api.instagram.com	2448
yui.yahooapis.com	1675
maps.google.com	608
p.typekit.net	334
csi.gstatic.com	314