

FIT5032 Design Report: Sea life protection

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## FIT5032 Design Report (HD Code Task)

### Sea Life Protection

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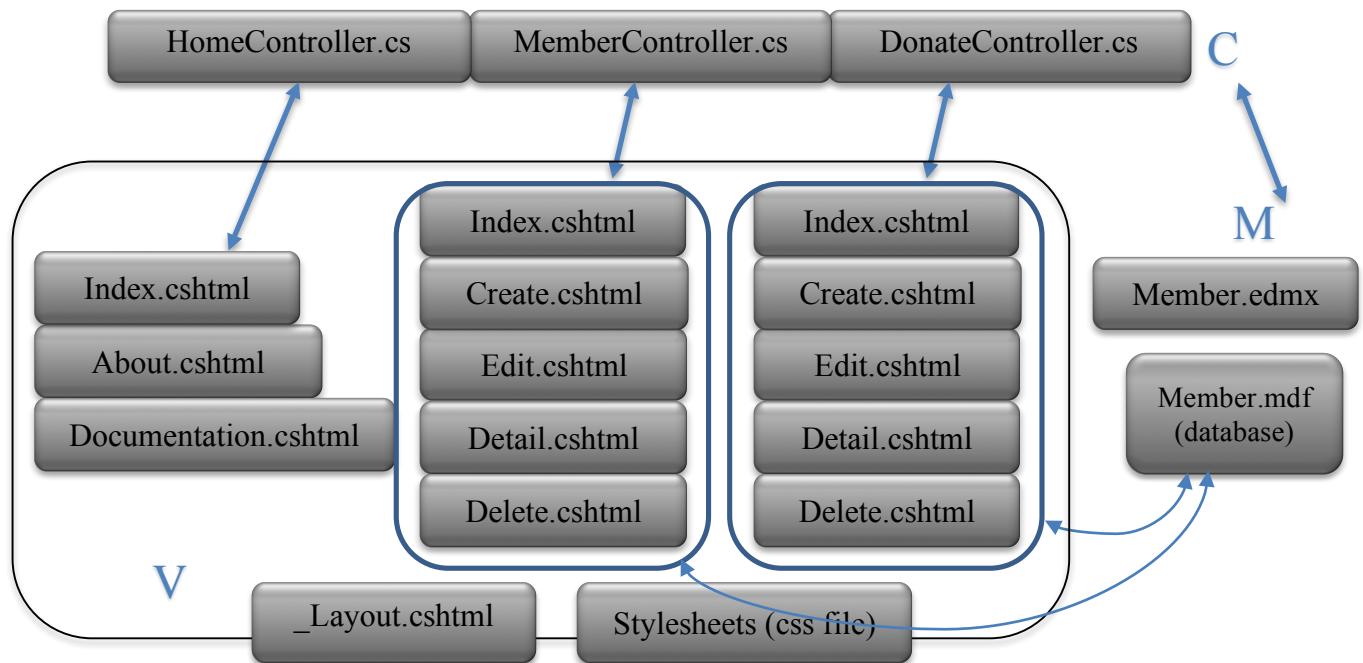
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## 1. Overview

Sea Life Protection website is dedicated to providing a platform for people to work together to protect marine life and organizing some activities to raise public's attention to protect endangered sea lives. This application provides following pages:

- Home Page: home page contains the vision of this website and what people do in this organization to protect sea life.
- About Page: When clicking About us tag in the top menu, users will see some information about the organization.
- Documentation Page: Include author information, assignment specification, image resources and additional function and JQuery.
- Member Page: Members are listed here and user can create, edit, delete members.
- Donate Page: This page display the donation record, and provide function to create, edit, delete as well.

## 2. Functional diagram



### 3. Core program functionality

With the use of ASP.NET MVC, the website provides a consistent look of the theme and option menu. The interaction between web pages and database is handled by Controller and model which are auto generated.

I mainly changed some style, filled in content and added some more functionality by modifying the generated code and using JQuery. The pages in this website including:

- **Home page:** Home page is designed to provide a whole picture of this organization's website and At the top of home page, a menu has been provided to navigate to about us, documentation, member and donate page and a tile and a theme picture have been presented at the centre of home page.

Home   About   Documentation   Member   Donate

# Sea Life Protection

We are one of the biggest Ocean Charity in Australia focusing on ocean wildlife.



Our vision is of a world where our oceans are healthy, properly protected and full of diverse life. In order to build this sea life world, we run inspiring conservation campaigns

- **About:** This page introduce the history of the organization and the effort they do to protect sea life with a graphic view. Too much plain content will make the reader boring. To avoid this, part of the paragraph is hidden. If the reader wants to continue reading about the organization, full text will be expanded by clicking "more" button.

## About.

### Learn more about us.

We are an independent charity, staffed by a committed group of professional and passionate scientists, educators and advocates who have defended Australia's oceans for 50 years. Our paid and volunteer staff work every day on behalf of the community to protect our ocean wildlife.

Sealife Protection works on the big issues concerning the sea. Our key focus is to create large marine national parks (marine sanctuaries), make our fisheries sustainable and protect and recover our threatened ocean wildlife, such as our sharks, seals and whales.

We also work to protect our precious coasts from inappropriate development, such as is occurring right now along the Great Barrier Reef.



[more](#)

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**The text of button will change to “up” for user to collapse the paragraph. While mouse hovers over the picture, the picture will also expand to get reader’s attention.**

We also work to protect our precious coasts from inappropriate development, such as is occurring right now along the Great Barrier Reef.



[up](#)

A key component in all of our campaigns is to give our oceans the best chance of resilience against climate change impacts. If we can keep our oceans in the healthiest and most natural state, without pressures from overfishing and pollution, then they will have increased ability to cope with these changes.

As part of this focus, we work to improve water quality and reduce pollution and marine debris, which entangles, chokes and smothers our marine life and habitats.

If you want to help ensure Australia's coasts and oceans remain healthy and free for tomorrow's generations, join us today.

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- **Documentation:** This page contains information of the author and provide link to the assignment specification. It also include the source of images used in this website and two links navigate to additional function and JQuery function.

Home    About    Documentation    Member    Donate

## Documentation.

Sealife protection Documentation page.

### Author

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Unit Name: Internet application development

Unit Provider: Monash University, the Caulfield school of Information Technology

Assignment Number: High Distinction Task

Date of submission: 21/10/2016

Tutors name: Linh Chu

[Email](#)

[Assignment Specification](#)



To draw users' attention, an animation to change image's size is applied here. Same to the function in About page, once the mouse moved over picture, the picture will enlarge.

[Email](#)

[Assignment Specification](#)

**Image**



**source**

<http://www.victoriandogrescue.org.au/?gclid=CLuYlunCx88CFdgkvQodfUADLw/>



Source from:

<https://mayanfamilies.org/page/animals?gclid=CNy1jdrCx88CFYKXvAodqnMIdA/>

[Advanced Functionality »](#)

[JQuery Functionality »](#)

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**Image**



**source**

<http://www.victoriandogrescue.org.au/?gclid=CLuYlunCx88CFdgkvQodfUADLw/>



Source from:

<https://mayanfamilies.org/page/animals?gclid=CNy1jdrCx88CFYKXvAodqnMIdA/>

[Advanced Functionality »](#)

[JQuery Functionality »](#)

- The two buttons at the bottom of documentation page will navigate to the following pages:

- **Advanced functionality Page:** Modification of the generated code is explained here.
- Advanced Functionality.

### Menu Links

Page: \_Layout.

Description: This layout page contains a site banner and menu links including the main subpages like Home, About, Documentation, Member, Donate.

### Alphabetical Sorting

Page: ~/Member/Index, ~/Donate/Index

Description: The initial list of the members and donations record are alphabetically sorted by the lastname of the members.

### CRUD Database Functionality

Page: ~/Member, ~/Donate

Description: Member and Donate provide the functionality including add a new record, read option for the user to "drill-down" from the initial view for further details of a record, update option for the user to edit information and delete option for user to delete the particular record. When adding or editing a record, validation displays appropriate error messages.

- **JQuery information page:** Here all the functionalities used by JQuery is listed including the pages using that function, and the source link.

Home    About    Documentation    Member    Donate

### JQuery Information Page.

Additional JQuery Function information

Function	Description	Page	Link
Alternating Row Colouring	Allow even row and odd row to change colouring	Views/Member/Index Views/Donate/Index	<a href="https://api.jquery.com/even-selector/">https://api.jquery.com/even-selector/</a> && <a href="https://api.jquery.com/odd-selector/">https://api.jquery.com/odd-selector/</a>
Row highlighting	The highlight effect hides or shows an element by animating its background colour	Views/Member/Index Views/Donate/Index	<a href="https://api.jqueryui.com/highlight-effect/">https://api.jqueryui.com/highlight-effect/</a>
Image size animation	When mouse move over pictures, the picture will be enlarged.	Home/Documentation Home/About	<a href="http://jqueryui.com/">http://jqueryui.com/</a>
Date picker	Select a date from a popup calendar	Views/Donate/Create	<a href="http://jqueryui.com-datepicker/">http://jqueryui.com-datepicker/</a>
Hide and expand	Part of the information is hide when the page load. There is a 'more' button to display full information and after click, it become 'up' which can hide back the information again	Home/About	<a href="http://jqueryui.com/">http://jqueryui.com/</a>

More self-study JQuery Function information

- **Member :** Display the member stored in database. Setting different colours for odd number rows and even number rows can be easily identified by users. When mouse is

moved over the table, that line will be highlighted by changing font color to white. Moreover, Members can be sorted by any columns while click column names. The search function above the table is able to search any matching values in database.

[Home](#)   [About](#)   [Documentation](#)   [Member](#)   [Donate](#)

## Index

[Create New](#)

Show  entries

Search:

Name	Address	Post	State	Mobile	Email	
Oliver	33 sunshine ST	3321	vic	0423109800	33w@gmail.com	<a href="#">Edit</a>   <a href="#">Details</a>   <a href="#">Delete</a>
Daisy	43 Center Rd	1234	Nsw	54354253543	54z.yan@gmail.com	<a href="#">Edit</a>   <a href="#">Details</a>   <a href="#">Delete</a>
Yan	43 Center Rd	3204	Vic	54354253543	54z.yan@gmail.com	<a href="#">Edit</a>   <a href="#">Details</a>   <a href="#">Delete</a>
Cris	44 Downtown	4314	NSW	0521345234	yzha777@gmail.com	<a href="#">Edit</a>   <a href="#">Details</a>   <a href="#">Delete</a>

Showing 1 to 4 of 4 entries

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- **Donate:** The index page is similar to Member's index, with alternative row to easily distinguish and one row can be highlighted when mouse move onto this row. It also have

Home    About    Documentation    Member    Donate

## Index

Create New

Show 10 entries

Search:

Date	Number	Name	
10/10/2016	3.00	Oliver	Edit   Details   Delete
09/10/2016	5.00	Daisy	Edit   Details   Delete
10/18/2016	11.00	Yan	Edit   Details   Delete

Showing 1 to 3 of 3 entries

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Because Donate table use the Member Id as the foreign key, while creating a new donate record, whatever member exist in member table will be displayed in the dropdown list.

## Create

Donate

MemberId

Yan  
**Daisy**  
Oliver  
Cris

Number

Home   About   Documentation   Member   Donate

## Create

[Donate](#)

MemberId

Date



October 2016						
Su	Mo	Tu	We	Th	Fr	Sa
					1	
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

Create and Edit page also have proper validation to make sure user enter a validate value.

Home   About   Documentation   Member   Donate

## Create

[Donate](#)

MemberId

Date

Number  
 The Number field is required.

[Create](#)

[Back to List](#)

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## 4. Usability Design Review

### 1. Navigation

There are five options in the navigation menu which is on the top of the \_Layout page. User can easily go into another page by click the tag. Every subpage also provide “back” in link format to navigate user to main page. Moreover, text is easy to see for users. Data in table have the different background alternatively.

### 2. Familiarity

The layout of the main page is typical and familiar for users, the name and theme picture is shown at the top of the home page, which is similar to most popular websites. Navigation is placed similarly on the top of the website. Theme title is in a big font size. This helps the users not thinking too much about where to click and spending more time on the contents. And the proper error message will pop up when users enter the wrong information during adding records.

### 3. Consistency

The chosen colour and picture of the webpage is consistent with the theme of this charity. With the use of Stylesheets and \_layout file in shared folder, page designs, table and button style are consistent to make the website as a whole.

### 4. Error Prevention

Adequate visual hints (text-size, red/greens and colour contrasts) and a clear layout are provided in this website to help user to prevent error input. For example, during registration, when a user clicks somewhere by accident or forgets to input something, the error message will pop up and make it easy for users to recognize, diagnose and recover from an error.

### 5. Feedback

A quick and timely response to user's interaction with this website is provided in this website, For example, when adding records to this charity, if users entered wrong input and then the prompt message will pop up quickly. Picture size enlarge when mouse over also provide immediate reflection to user's action.

### 6. Visual Clarify

Content and site structures are arranged in a visually clear layout to navigate for users. The simplicity of sea life protection website helps to improve the visual clarity. In the website users can easily see what information they want to click because of the clear layout.

## 7. Flexibility

A flexibility website design should be fully proportional for multiple devices and this Sea Life Protection website can automatically adjust to fit multiple screen size. Therefore, only one version of this website should be developed instead of designing one for computer and another one for other mobile devices.

## 5. Checklist of site functionality

	TICK if complete
<b>1. Master Page</b>	
Design	√
<b>2. Home Page</b>	
Design	√
<b>3. Content Pages</b>	
Design	√
Alphabetical list	√
Add Records	√
View Details	√
Edit Records	√
Delete Records	√
Add/Edit Validation	√
Search Function (Custom Template)	√
jQuery Functionality	√
<b>Additional Functionality</b>	
Image enlarge when mouse over	√
Sort data in table	√
Row highlighting	√
Date picker for user input date	√
Different row colour for alternative rows	√
Hide or expand information with animation	√

<b>Documentation</b>	
Author/assignment details	√
Advance function information	√
JQuery function information	√
<b>Audit</b>	
No breaking of copyright	√

## 6. User stories

As a user, I want a website looks clear and professional. Therefore, I put a big and attractive image in home page with few lines of brief description of the organization. The menu at the top makes the website consistent. Colour setting is also important to the feeling of entire website. All the colour I used are light colour which will make the web looks clean and tidy. Images can enlarge when the mouse moved over. This make the website more professional.

As a user, I want to get the important point at the first glance. The font size and background colour setting all emphasis the topic or the key points. A whole page of text is avoided by hiding some paragraph with a button. If user want to read, simply click it will expand full text. Alternative row background is set to make the information clear. When mouse moved over, the row will be highlighted to remind user.

As a user, I want a powerful search function. So here I expand the search boundry, which means anything matching with the search value will appear. It won't be restrict to a specific column.

As a user, I want to avoid wrong input when I fill in a form. Therefore the validation is set to make sure the user input correctly. Moreover, for Donate page which use Member ID as foreign key, it provide dropdown list that hint the user with correct information. Also, date picker is provided for Date input that make it easier for user and avoid wrong input.

## 7. Data dictionary

Name	Type	Description
<u>HomeController</u>	.cs	The Home Controller control all about information in home page and control the action and view
<u>DonateController</u>	.cs	The Donate Controller control all about Donate information and control the action and view
<u>MemberController</u>	.cs	The Member Controller control all Member information and control the action and view
<u>MemberModel</u>	.edmx	This is used to link other components with database. Primary and foreign key has set in the model.
Member	.mdf	This is the Member Database, including two tables. Member and Donate.
Site	.css	Site page is to set all of the web style for the application
Shared/Layout	.cshtml	This is the website setting applied to all web pages.
Donate/Index	.cshtml	This page display the default page related to Donate controller
Member/Index	.cshtml	This page display the default page related to Members controller
Member/Create	.cshtml	This page provides the function to create a new

		member in the member Page.
Home/Index	.cshtml	This page is the default page of this Web application.
Home/About	.cshtml	This page contains all information about this organization.
Home/Documentation	.cshtml	This page displays all of the author information, Image details, and JQuery details.
Home/Function	.cshtml	This page shows all advanced function information details.
Home/JQuery	.cshtml	This page displays all additional JQuery information details.
Scripts/myScript1	.js	The jQuery used to change the even row and odd row colour. Additional used to highlight of each row.
Scripts/myScript2	.js	The second jQuery is the data Picker jQuery.
Scripts/ myScript3	.js	This jQuery is the dataTable jQuery.
Scripts/JavaScript	.js	This include the function to enlarge images when mouse move over, and control information collapse and expand.