

DEVELOPMENT RAPORT- SECRED TREES APLICATION

Dorota Burdach 4028113

*Advanced Website
Technology/
Assesment 1*

| Napier University

Table of Contents

| | |
|--|----|
| Introduction | 2 |
| Overview (assessment requirements) | 2 |
| Catalogue idea | 2 |
| Catalogues | 2 |
| Access | 2 |
| Content | 2 |
| Brief | 2 |
| Resources Required for Project Delivery..... | 3 |
| Design | 4 |
| Inspirations | 4 |
| Storyboards..... | 6 |
| Colors in website Colors..... | 8 |
| Background image | 8 |
| Evaluation | 9 |
| Evaluation | 9 |
| Assessment requirements..... | 9 |
| Brief | 9 |
| Improvements..... | 10 |
| - Admin Panel | 10 |
| - Contact Form | 10 |
| - Blog/ User accounts | 10 |
| - More Content..... | 10 |
| Personal evaluation | 10 |
| Resources..... | 12 |
| Images and content | 12 |
| Images..... | 12 |
| Content | 12 |
| Code..... | 12 |

Introduction

Overview (assessment requirements)

I was asked to design and developed online catalogue with own choice of subject. The catalogue requirements were to:

- Be creating using Python Flask and run in Levinux learning environment.
- Have demonstrated well-designed URL hierarchy.
- Provide routes with right response of the html pages and its code and content.
- Demonstrate proper use of directories as static and templates.
- Demonstrate practical knowledge of using python redirect, request, responds should been also demonstrated when routing the pages.
- Be designed in a way other person despite the developer could be able to use it.
- Codes be written by the app author and report must be committed to Git repository before 26th of October.

Catalogue idea

Catalogues

For the subject of the catalogue I have chosen the Celtic sacred trees. My idea I have based on the book of Glennie Kindred 'The Sacred Tree'. The catalogue contains main category of the Celtic season's and shows the organisation of the trees classified for each season as a sub category.

Both seasons (main category) and trees (subcategory) information are stored in two database tables.

Access

Access for the season category is from the sub-menu as well as from the index page.

Subcategory is able to be access from main category (each season page) as well as separate by the separate link showing all the list of trees.

Content

Each season contains the name, description, image and links to trees connected to it.

Each tree page prints its name, Celtic name, tag, description (energy and healing) and two images (full shape and detailed).

Brief

The purpose of the website is to encourage young people to interest Celtic culture and trees knowledge to make them develop imagination, sensitivity and connection to the natural world. The catalogue will show the Celtic seasons of the year with additional trees connected to each season. Website will provide information about each tree with its images and description.

Resources Required for Project Delivery

| Platform | Laptop |
|-------------------------------|---|
| Browser | Opera, Chrome |
| Operating System | Windows 7 |
| Server | Local host on Levinux (virtual Linux server) |
| Programing Language | Python |
| Micro Web Framework | Flask |
| Raster Graphic Program | Adobe Photoshop |
| Vector Graphic Program | Corel Draw |
| Text Editor | Notepad ++ |
| Internet Tools | Colours tool http://color.adobe.com/ Accessibility http://wave.webaim.org/ |
| Report | Microsoft Word |

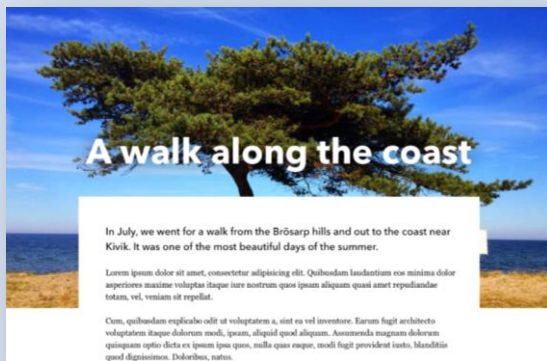
Design

Inspirations

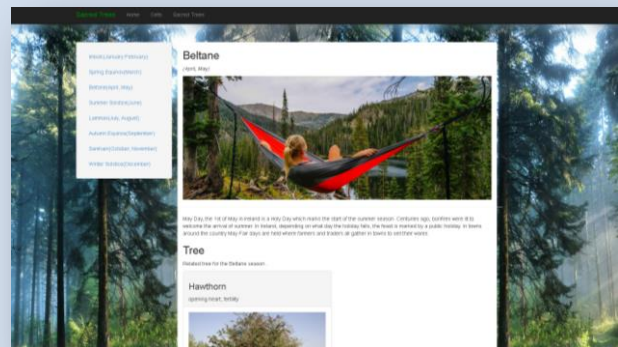
1) Background image

The application should be an online journey through the forest looking for different trees and understanding the Celtic culture. That is why I have chosen the background image where content have good contrast by the white background of the panel, however image behind brings feeling of the window to the new place to discover.

inspiration



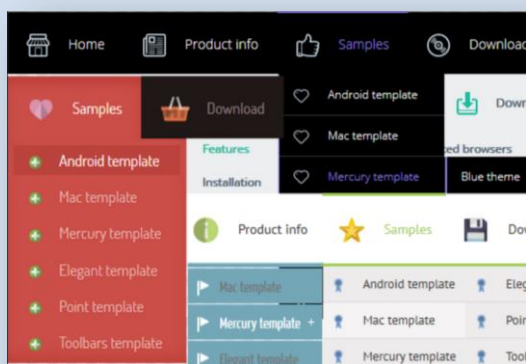
performance



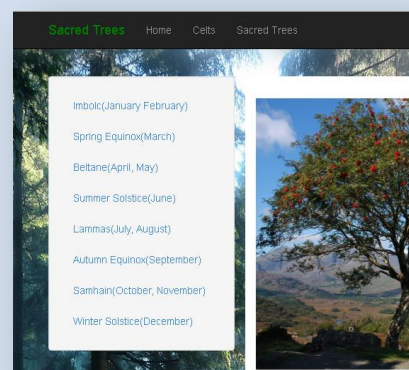
2) Sub menu

When the content is more complicated – as in this case of routing thought the catalogues – sub menu makes available more links and brings better understanding of the subject.

inspiration



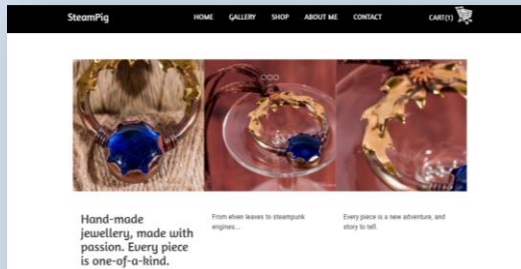
performance



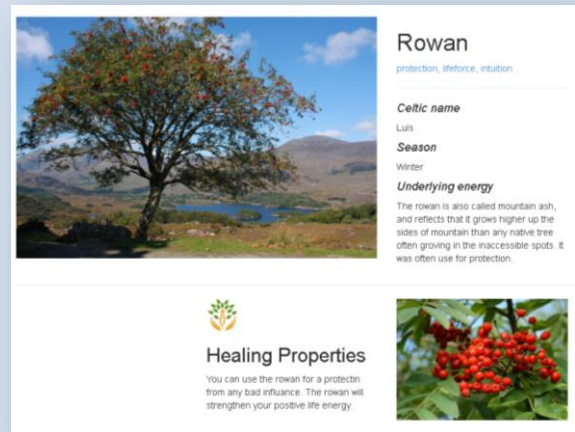
3) Image showing details

This idea I took from the hand made shop and I have implemented it to the the trees page, where I am showing the overall look of the tree and its detailed elements as leaves and fruits.

inspiration

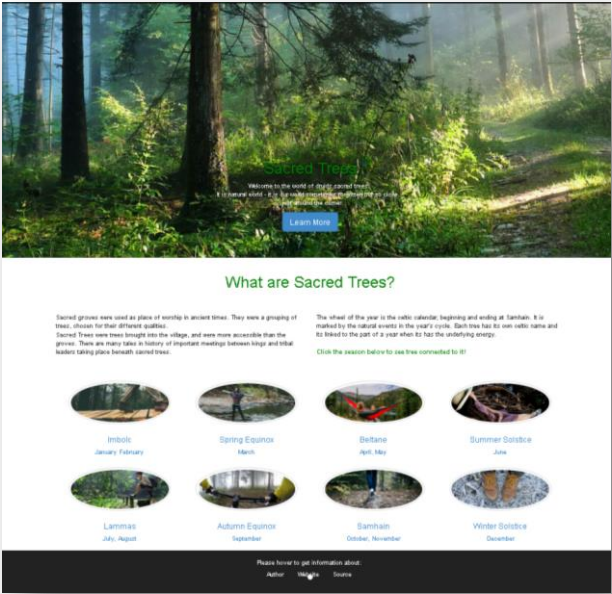
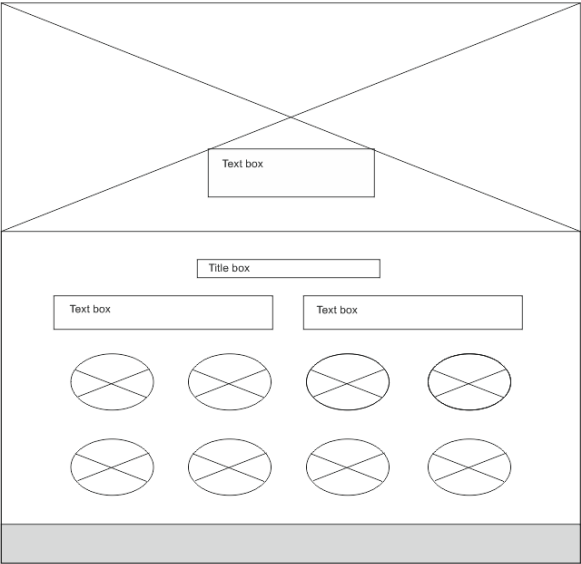


performance

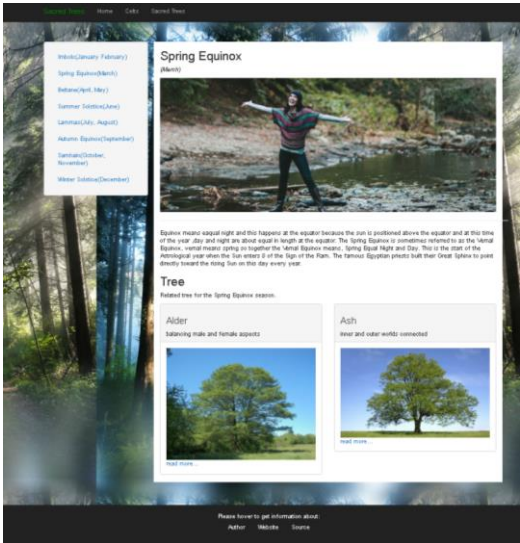
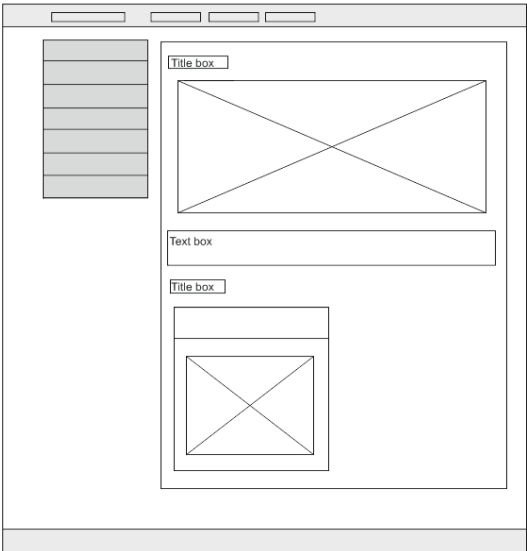


Storyboards

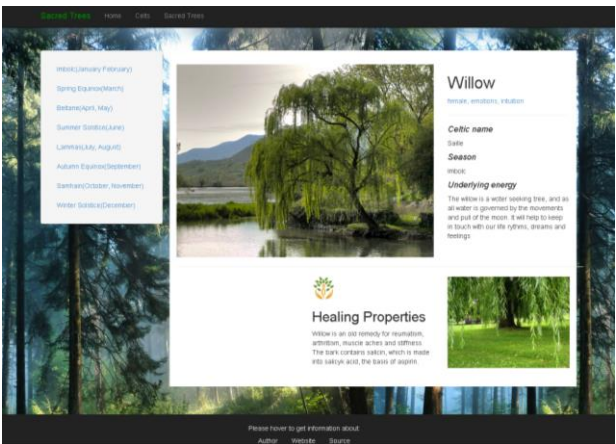
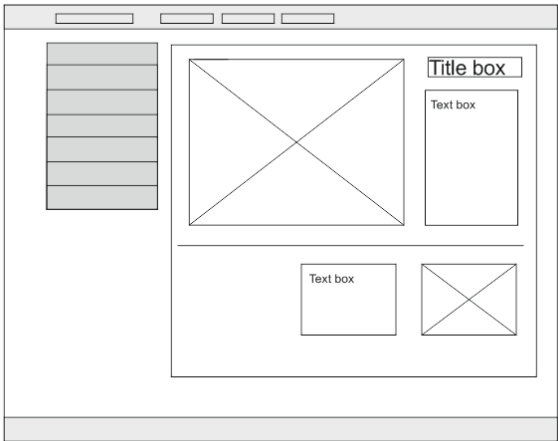
Home page



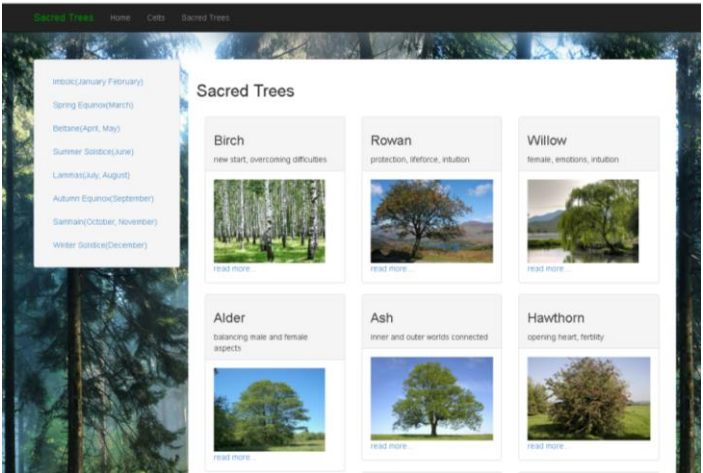
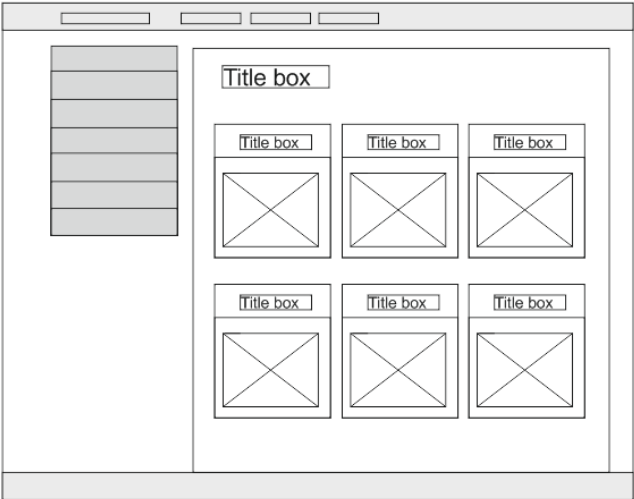
Season Page



Tree Page



Tree List Page



Colors in website

Colors



The colors are used in the application are connected to the nature subject

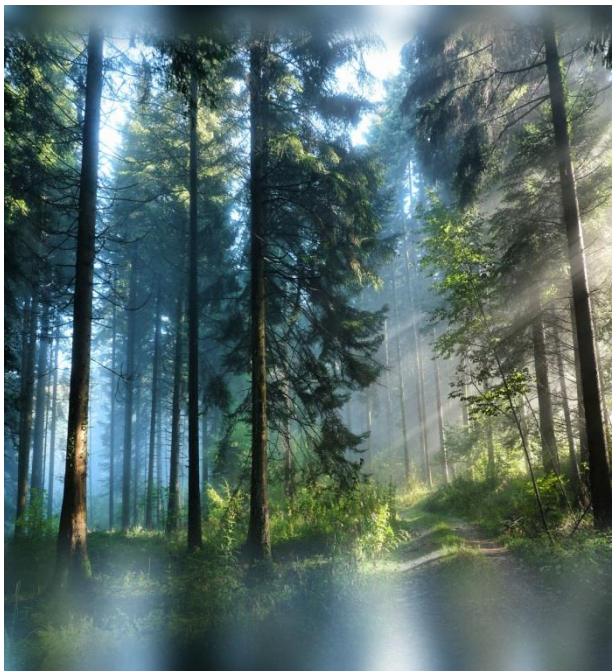
- blue for links (water, sky association),
- green for main page headlines (trees, grass).

It remains the walk into the forest where basic colour will be nature colours.

Other colors are neutral

- black for main menu
- greys for sub-menu and panels
- white for container background

Background image



Background image tones are similar as the website to show the content in the harmony and to correspond to all other images.

There are no leading colors which would stand out with its contrast because of many images drugging attention of the user. Adding such a color would make the website 'overcrowded' with forms.

Evaluation

Evaluation

Assessment requirements

The application was build using Python Flask which runs using Levinux frame work.

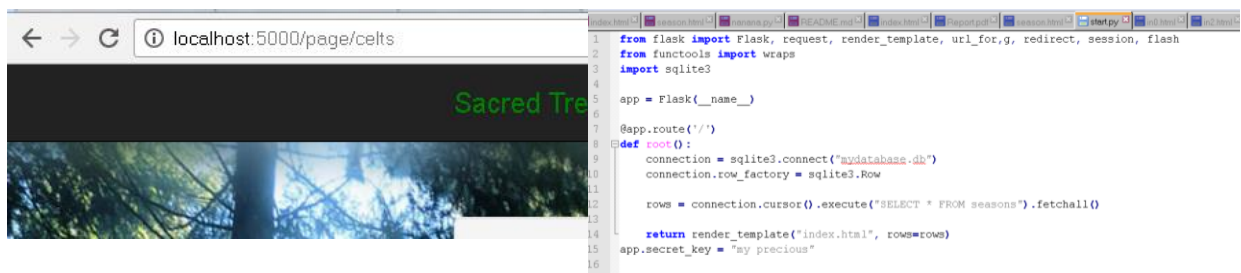
The url hierarchy can be seen by the catalogues of seasons and connected to them trees.

The routes are properly named and work for layout (celtic, sacred trees) and to retrieve database information (index, trees and seasons).

The application is organised using directories as static – where from are linked all the images- and templates -where all the html files are stored.

Start.py python knowledge about request, render_template, url_for, redirect, session, flash, which are used in the application.

Application is built as a responsive website able to use by the target group users.



Brief

The application meets the requirements of the brief by crating readable and easy to follow pages with constant design and good readable content texts. Using images showing different activities in the forest performed by the young people can encourage the target group to visit and fallow the website. Colourful images and background helps find connection with the subject of forest, nature and trees.



Improvements

For the improvements should be used done in few matters of the application:

- **Admin Panel**
It is existing as the login only, however there should be added CRUD, which makes the admin able to edit content on the page.
There should be database used to store names and passwords, hashed and salted for encrypting.
- **Contact Form**
Most of the website has the contact form, where users can communicate with the website owner/admin.
- **Blog/ User accounts**
Nowadays, when social media are so popular users, especially the young ones, expect the website to have more features, which can respond to their action. One of them is a blog, where they could write their experiences or account where they can add comments, communicate between each other and personalising it by adding own picture, description.
- **More Content**
There might be included more content to the website with more catalogues or for example Youtube videos showing some of the features, for example when to pick up the trees leaves and how to dry them to make a tea infusion.

Personal evaluation

With this project I have learned python 'from the scratch'. I had previous knowledge about some database aspects; however framework as Levinux, Git Hub, Python and Python Flask was completely new for me. I have improved my knowledge in base of creating the database tables, developing the application connected to other html pages, how to show the data from database and how to run the final application in by the localhost server.

I have also set up the GitHub account and learned how to upload particular parts of the project.

During developing I find some problems I had to solve for the project purpose. I used the lab classes where I could ask the tutor; I looked for help from my class mates, however real base gave me the online tutorials (Youtube) and Stackoverflow website (blog solving the codes problems)

Main problems I had when I just started to code in Python was understanding space sensitivity. Even if I had the same code typed by me according to the tutorial it did not work as expected just because the spaces or tabs.

Another difficulty was the Levinux system which as a Windows user I am not used to. I have installed the WinSCP which shows the files in folders as the Windows do.

Biggest problem for me also understood passing more than one variable into html page. With help of my tutor and practising at home I finally manage to retrieve needed information from the database table.

There were also problem with the Levinux and its installation as 'broken pipe' which was the reason quick finishing or none contact with the localhost and the browser. I have fallowed the code from the Stackoverflow website which helped me solved the problem.

Even if with this task I have learned a lot I still need to improve my skills.

I want to learn how proper linked the style sheets and other external links to the pages.

I would like to learn about connecting the database tables and how to secure the request form the website as for example taking the name or id from the page address.

Finally I would like to learn how to implement the website into a real server.

Resources

Images and content

Images

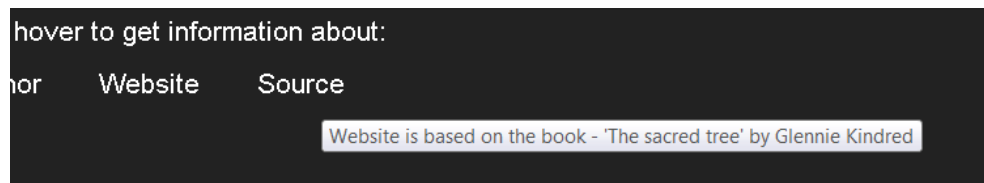
All images were taken from the free source of <https://www.pexels.com/> which allows free commerce use of the photos.

Content

The website is based on the book of [Glennie Kindred 'The sacred tree'](http://www.glenniekindred.co.uk/booksprints/thesacredtree.html).

<http://www.glenniekindred.co.uk/booksprints/thesacredtree.html>

All the season and trees description was rewrite from the book by developer. The source was added for the footer of the application:



Code

Application html pages are based on the Bootstrap. Css and js files are also a part of the Bootstrap code library.

<http://getbootstrap.com/>

There was used as well the template from Bootstrap Zero:

<https://www.bootstrapzero.com/bootstrap-template/sidebar>

The part of the code solving loading issue was taken from the Stackoverflow website:

<http://stackoverflow.com/questions/12591760/flask-broken-pipe-with-requests>

Helpful websites and Youtube tutorials I have use for development:

- Python overall
<https://www3.ntu.edu.sg/home/ehchua/programming/webprogramming/Python3Flask.html>
- Login page:
<https://www.youtube.com/watch?v=BnBjhmsp4c>

External links

There is an external link in admin panel allowing to send email to the developer in case of any changes might be add to the website. It's use a free online email:

<https://anonymousemail.me>¹

¹ In my first project with Python my knowledge was not enough to code own contact form, however I still wanted to give the admin panel sense of use, which is why I have chosen the online tool.