Higher Diploma in Computer Science

Web Applications

Wedoo - An Event Planning Web App

RecipeHub - Web Application for the storage of recipes

ReMed - REmote MEDical device monitoring for Primary Care

SELECTAH - Digital Music 'Tempo' Analysis and Data Storage

Tool

Unison - Collaborative Work Platform

Native Android Apps

CowCalendar - Dairy Herd Management Tool

It's a Baby Changer - rate and review locations of baby changing facilities in Ireland.

LiveDive – Dive logging app

Desk Request - Company Office Desk Booking app

Rhythm & Booze – POI app for Irish music venues

Puerto Rico Social – Pocket Guide of Puerto Rico de Gran Canaria with Social Network

PROJECT SHOWCASE



2021

Combined Web & Mobile

iSurvey - Survey Management System
NDA1 - NDA

Other

EvolveCLI - Evolving from a Wordpress Site into a Modern Web Application waltoninstitute.ie

Chat Generator - Chat Generator Test Harness with Automated Deployment using Jenkins pipeline 09.30 Anne-Marie O Loughlin

TUESDAY, JUNE 8th

Wedoo - An Event Planning Web App

10.00 Niall Phelan

ReMed - REmote MEDical device monitoring for Primary Care

10.30 Killian O'Neachtain

SELECTAH - Digital Music 'Tempo' Analysis and Data Storage Tool

11.30 Evan Mockler

RecipeHub - Web Application for the storage of recipes

12.30 Marie-Pierre Beaudoin

Unison – Collaborative Work Platform

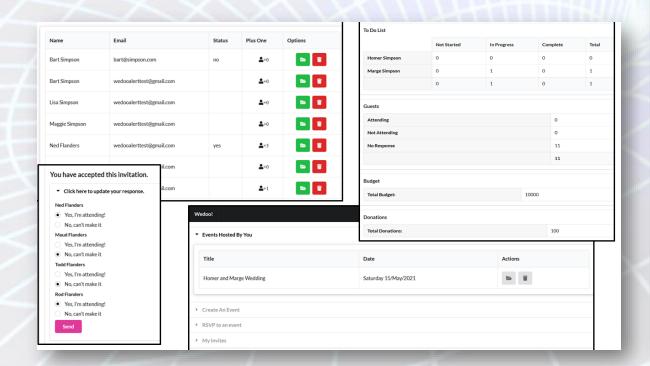
WEB APPLICATIONS

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Wedoo An Event Planning Web App

Anne-Marie O Loughlin



Wedoo is an event planning web application. Wedoo is built using the Hapi framework and a handlebars front end. The app is targeted at wedding planning but can be used for all types of events.

The application includes a PayPal donation function to allow guests to donate to fundraisers they are attending or to send a gift to a couple getting married.

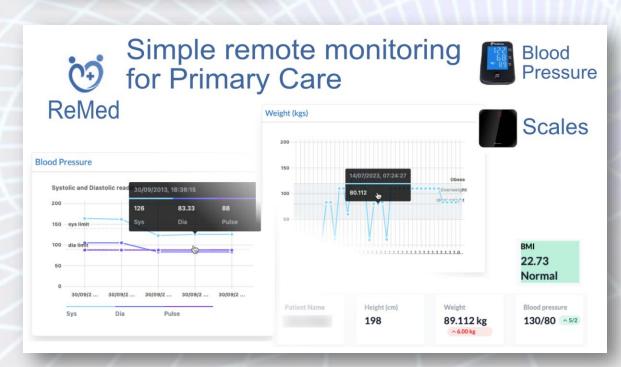
Wedoo also includes guestlist management functionality which consists of electronic RSVPs and optional Excel file upload.

Wedoo allows hosts to automatically send email requests to guests to add their information or RSVP.



ReMed REmote MEDical device monitoring for Primary Care Web App

Niall Phealan



A modern web application for Primary Care practices enabling monitoring and analysis of patient measurements, such as scales and blood pressure monitors.

Remote monitoring during the current pandemic has become essential and there has been more acceptance of remote monitoring handled by Doctors in the Community.

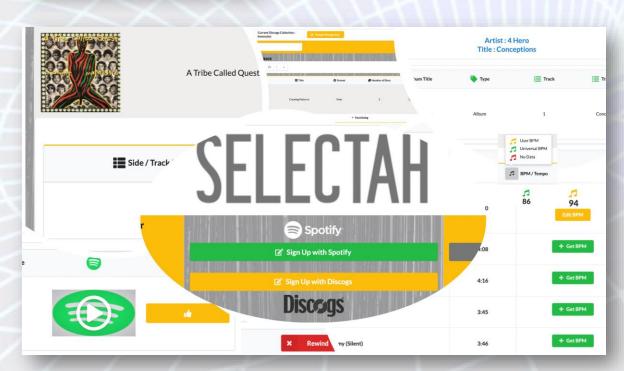
This application allows for simple device registration and transport of the data to the cloud via mobile telephony. All information is available via a web browser on PC and mobile. Notifications are implemented for certain conditions via email.



SELECTAH

Digital Music 'Tempo' Analysis and Data Storage Tool

Killian O'Neachtain



Selectah is a web-based application to analyse tracks and acquire 'Tempo / Beats Per Minute (BPM)' of a track. Designed using the MERN stack.

Using a collection of releases from 'Discogs', users are able to search 'Spotify API' for audio analysis on a track from a releases' track list. Key fields from track audio analysis, returned from Spotify, are stored in a database for that particular user. If the 'Discogs' track and the 'Spotify' track meet app specific matching criteria, the BPM is made universal, so all users can see it.



RecipeHub Web Application for the storage of recipes

Evan Mockler

Are you tired of having your favourite recipes strewn across various websites and cookbooks?

RecipeHub is an extremely easy to use web application which allows members to submit their favourite recipes, along with storing them in one spot.

Users can upload photos, assign dietary categories, and browse the submissions of other members.

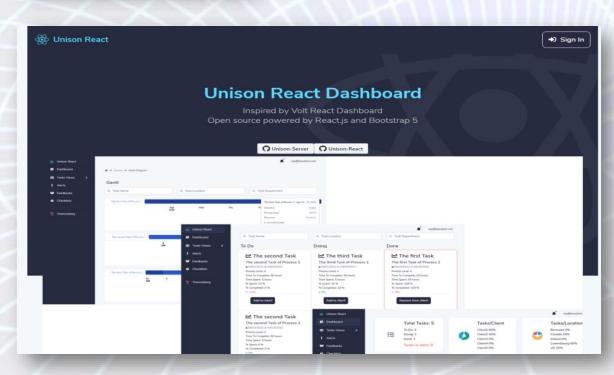
A fluid semantic UI experience allows users to navigate throughout the application in just a few clicks of a mouse.

RecipeHub is a node js webapp which is built using a Hapi server, handlebars framework and Mongo database. Images are dynamically handled by an intuitive Cloudinary plugin.



UnisonCollaborative Work Platform

Marie-Pierre Beaudoin



Collaborative work platforms have never been more on trend than in 2020. As COVID-19 IS changing the modus operandi of all corporations around the world, there is a need to revaluate processes and workflows in a business environment.

Asana, Trello, Wrike are emerging as the leading solutions. However, the one-size -fit-all-approach might not be suitable for smaller size organizations. APIs to major software vendors like Salesforce, PowerBI or Tableau quickly become expensive and do not necessarily fulfil the business requirements.

This project explores a cost-effective option that can be tailored to the specific needs of a medium-size organization to improve workflows



09.30 John Mc Cann

WEDNESDAY, JUNE 9th

iSurvey - Survey Management System

10.00 Kenneth Chadwick

EvolveCLI - Evolving from a Wordpress Site into a Modern Web Application waltoninstitute.ie

10.30 Dermot Sheerin

Chat Generator - Chat Generator Test Harness with Automated Deployment using Jenkins pipeline

11.00 Aidan O'Brien

ND1 - NDA

NDA, COMBINED WEB & MOBILE, OTHER

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iSurveySurvey Management System

John McCann

iSurvey is a survey management system designed to aid Kerry County Council with public consultations that arise and enable staff to get public opinion by surveying the public with the aid of this application. The workflow:

Backoffice user creates survey, assigns questions to the survey and assigns the survey to the survey taker. From the mobile device the survey taker downloads the survey and questions.

The survey taker surveys the public and asks associated questions.

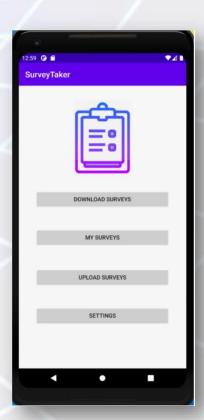
The survey taker uploads completed surveys and then the back office user reports on the surveys taken.

Technologies used:

BackOffice (Node.js, Bootstrap, handlebars, mysql andjquery).

API (Node.js, Mysql).

Mobile (Android and sqlite)







EvolveCLIEvolving from a Wordpress Site into a Modern Web Application

Kenneth Chadwick

We pioneer research to advance the science & role of ICT to benefit humanity.

Formerly known as the Telecommunications Software & Systems Group (TSSG), we create economic impact by translating our knowledge and innovation into leading edge products and services by continuing our engagement with Industry in collaborative R&D, knowledge generation and transfer.

TSSG has rebranded to the Walton Institute.

The new waltoninstitute.ie website had to preserve and continue to serve a great deal of legacy data, previously housed on tssg.org, a Wordpress site. The Walton website seamlessly integrates legacy data with new content in a simpler, faster, more responsive frontend client.

This is achieved through extending the Wordpress REST API, thus making use of the same underlying data model as tssg.org, but decoupling the frontend implementation, building a new frontend client from scratch with Next.js.

This can serve as a model for organisations looking to move on from Wordpress and make use of more modern web technologies.

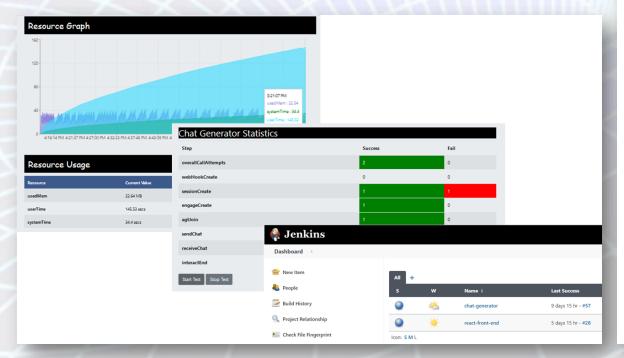




Chat Generator

Chat Generator Test Harness with Automated Deployment using Jenkins pipeline

Dermot Sheerin



A chat generator tool capable of simulating customer chat interactions with Contact Center agents. The chat generator will first establish a session with the contact center via REST API requests. Once the session is established the generator will send a chat message and wait for the contact center agent to respond. After several chat message exchanges the chat generator will terminate the call.

Driven by a user interface the user has the ability to set test parameters and view live resource usage and chat statistics data throughout the test run.

A Jenkins pipeline will automate the build and deployment of the chat generator and user interface applications into docker containers.



NDA1 NDA

Aidan O'Brien

This project information is withheld under NDA

09.30 Jessica Mc Cabe

FRIDAY, JUNE 11th

Puerto Rico Social - Pocket Guide of Puerto Rico de Gran Canaria with Social Network

10.00 Paul Holohan

Desk Request - Company Office Desk Booking app

10.30 Claire Mc Veigh

It's a Baby Changer /- mobile app to rate and review locations of baby changing facilities in Ireland

11.30 Israel Finnerty

Rhythm & Booze - POI app for Irish music venues

12.00 Grace Finnerty

LiveDive – Dive logging app

12.30 Andrew Helen

CowCalendar - Dairy Herd Management Tool

NATIVE MOBILE APPS

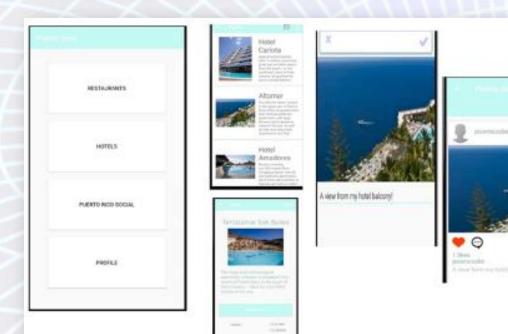
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Puerto Rico Social

Android Pocket Guide of Puerto Rico de Gran Canaria Social Network

Jessica McCabe



Android Mobile Pocket Guide of Puerto Rico de Gran Canaria with social network.

Written in Kotlin, this mobile app provides users with a pocket guide of Puerto Rico, listing useful information on the area including hotels, bars, restaurants and activities. Users can view opening hours, location, map to the selected place, book hotels etc.

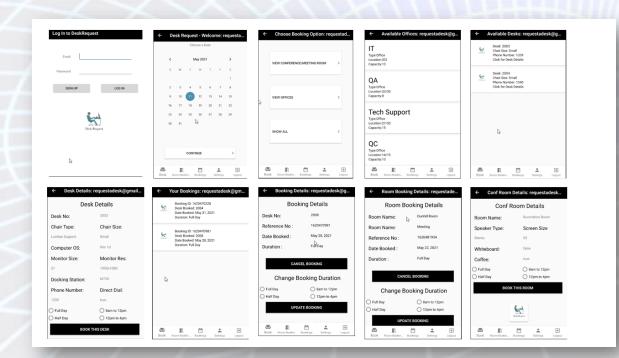
Admin users can add and manage their business – updating hours of business, listing special offers and more.

Included in the app is Puerto Rico Social, a social network aspect where users can post a status, comment on posts, follow users, like post and maintain their profile.



Desk RequestCompany Office Desk Booking Android Application

Paul Holohan



DeskRequest, a Native Android Application, primarily aimed at Companies post Covid return to work protocols, facilitates the prebooking of desks in an office or the booking of meeting/conference rooms.

Room and Desk bookings are confirmed by email and are available for viewing to the user within the application. The application also supports the cancelling and updating of existing bookings and these are also confirmed via email.

The app utilises Firebase Authentication with Rooms and Bookings persisted via a Firebird Realtime Database.



It's a Baby Changer

Native Android Application to rate and review locations of babychanging facilities in Ireland

Claire Mc Veigh





The It's a Baby Changer application would potentially run on web, IOS & Android devices that communicate with a backend API but for the scope of this project, it is a native Android application only.

This scope includes user authentication and user account creation. A user will then be able to log in and add a Baby Changing facility. They will add a picture, give it a review, indicate if its open to all users, rate it and mark it on the map. This will be added to the database with the end goal being that you have a nationwide app that reveals where the best baby changing facilities are.



Rhythm & Booze POI app for Irish music venues

Israel Finnerty



| Venue | Location |
|---------------|----------|
| Pipers Corner | Dublin |
| O'Donoghues | Dublin |

TRADITIONAL IRISH MUSIC

 O'Donoghues
 Dublin

 An Púcán
 Galway

 Sin É
 Cork

 Dolans Pub and Restaurant
 Limerick

Sin É

Cork corkheritagepubs.com/pubs/sin-e



Open since 1899, this is no newcomer instead, it's one of the most well established but for those looking to enjoy some traditional rish music in the Rebel CIts, For the last five decades, they've offered non-stop trad sessions every evening of the week and they've very special line op prepared for the coldest nights of the year so keep an eye for their winter sessions, nightly from 7:00 pm and let the sound warm your heart.

Latitude , Longitude 51.901772 , -8.4710



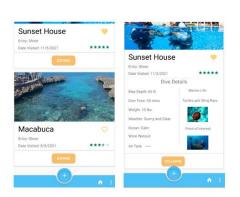
A point of interest android app for music venues in Ireland that interacts with a web based API.

The app allows the user to signup and login using firebase authentication. The app lists previously uploaded venues within categories and provides a description, photos and location details. The app allows users to upload their own venues and photos as well as leave ratings and reviews on other users uploaded venues. Photos are stored on cloudinary. The map function shows nearby venues and provides directions for the user.

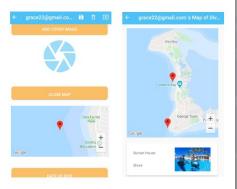


LiveDive A Dive Logging, Android Native Mobile Application

Grace Finnerty







LiveDive is a dive logging application which allows users to log and view details about their diving experiences. Developed using Android Studio, the app utilizing Kotlin as a dynamic and efficient way to build robust mobile applications.

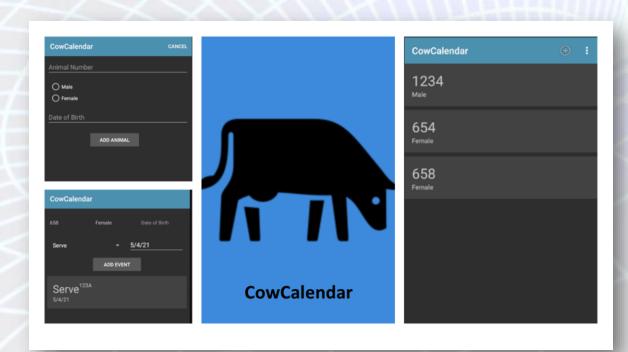
Key information such as dive site location, date, name of dive site, max depth reached and length of dive etc. can all be logged. Favourite dives can be set and viewed separately. All logged dives can be seen via the map view to give an overview of sites visited. Diver profile is also stored, recording key information such as certification type, certification number and number of dives recorded.

Key technologies used: Koitlin, Firebase, API, Agile methodology, GitHub



CowCalendar Android Based Dairy Herd Management Tool

Andrew Helen



CowCalendar is an Android application to allow farmers record key events during the reproduction cycle of a dairy cow.

The captured information is presented in a way that allows the user to quickly identify animals that need attention. If animals do not meet key dates they are highlighted to the user, preventing time lost in getting the cow pregnant again.

Data is stored using the Firebase real-time database to enable multiple users access and update the application.



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https://www.wit.ie/courses/hdipcomputerscience2yearparttime





Best Use of Educational Technology / ICT Initiative of the Year

3rd Place



Winner

Best Use of Educational Technology / ICT Initiative of the Year

