Client Services Level One

Position Description

Student Project – Retail / Hire Web App
Semester 1 2021

PROJECT TITLE:	Retail / Hire Web Application
DIVISION:	Community Development
BASE SYSTEM:	Open Source eCommerce Platform
GITHUB REPOS:	
REPORTING TO:	Head of Community Development

Client Overview

Rocky Valley Bike Hire Ski Hire is a retail business located in Mt Beauty in Northeast Victoria. They have 4 parts to their business as follows:

- Ski Hire / Service – Hiring skis to skiers during the winter months (June – September), ski tuning and servicing.

- Bike Hire / Service – Hiring road and mountain bikes

- Product Sales including Skis and Bicycles, Ski and Bike accessories, summer water sports

- Cafe – Drinks, smoothies and light snacks

For simplicity, the business will be referred to as Rocky Valley.

Rocky Valley is owned and operated by a husband and wife team Glenys and Brian where Brian runs the Ski Hire and Bike Hire operations and Glenys runs the Product Sales and Cafe side of the business.

Systems

Rocky Valley operate various systems to run their business with limited integration between them as depicted in diagram 1.

MYOB AccountRightPlus serves the accounting and finance management of the business. This software is commonly used by many Small-Medium Enterprises to operate their business. AccountRight is great software for distributors (B2B) however it lacks retail Point Of Sale features (Fast point of sale workflow, cash register and docket printer integration etc).

Rocky Valley use separate Point Of Sale (POS) systems each targeted to different parts of the business. Lightspeed is used for Cafe sales due to its high speed hospitality based ordering. MYOB Retail Manager is used for the Shop which covers Ski Hire, Bike Hire, Service Jobs and Product Sales. Both POS systems have a limited integration with MYOB AccountRight in order to post end of day transactions (Sales) to the General Ledger.

For the Ski Hire functions, Rocky Valley have developed their own Apple Filemaker System where they use iPads to capture customer/guest details, settings and equipment selection and produce a hiring contract / Tax Invoice. The hiring contract is then manually entered into Retail Manager POS along with another other products the customer wishes to purchase.   The filemaker system can only be accessed via a device at Rocky Valley's shop.

Similarly, Rocky Valley use Bike Rental Manager to rent bicycless out to customers and again manually enter the sale into Retail Manager POS to complete the transaction. Bike Rental Manager is an online application allowing customers to hire bikes online or in-store.
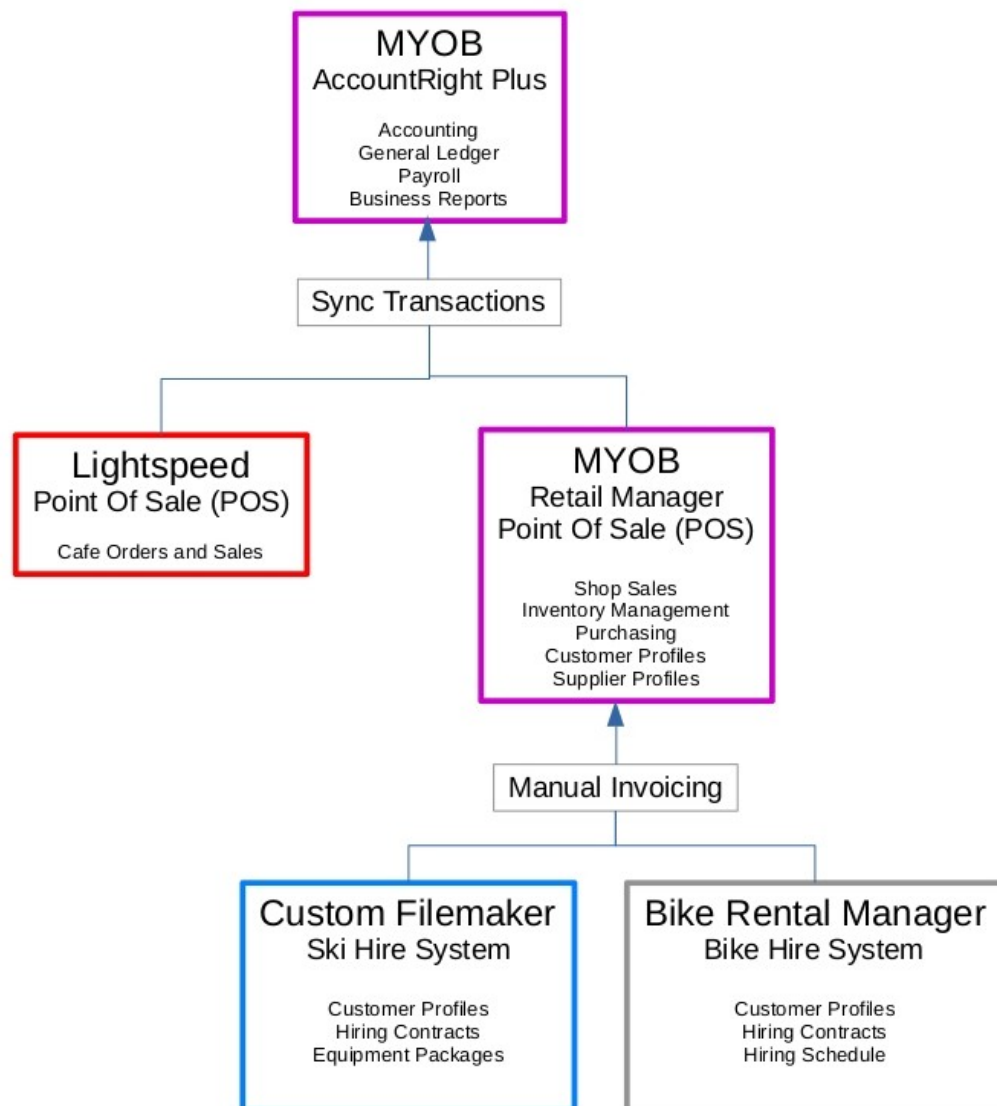https://bikerentalmanager.com/

Diagram 1: Client systems layout

Project Overview

Rocky Valley would like to replace their Filemaker System with a Ski Hire and Product Sales system that aims to achieve the following:

- Allow online bookings of ski hire equipment and gear and purchasing of products

- Combine hired equipment and other product purchases to a sales order

- Post the sales order to Rocky Valley Retail Manager system via SQUIZZ.com for completion of payment

- Provide a simple and intuitive workflow so that customers and staff can quickly learn the system through self-guided means

- Ensure that integration between systems is seamless for customers and staff

Current Ski Hiring Workflow

1. A customer intends to hire skis or snowboards and wants to procure them by arriving in the store.
2. The staff member opens the Filemaker program and the customer is searched and if not found, the customer details are entered (first/last name, address, phone, email) plus the number of Days / Date for hire and return.
3. The staff member asks the customer who is going to hire equipment. For each person:
   1. Add each person to the hiring list and enter their personal settings which are required to pick the correct equipment and make sure the settings align with their ability. (Height, weight, etc)
   2. Pick the Equipment Type / Package they wish to hire
   3. Confirm the price (if asked by the customers)
   Screenshot 1: Customer Hiring form for the FileMaker software

4. The Tax Invoice button is pressed and the Contract Report is displayed and printed on 3 layer paper for the customer to Sign (Hiring Contract).
5. The Hiring Contract is passed to another staff member who will work with the customer and their group to fit them with the correct equipment as specified on the hiring contract for each person.
6. The staff member goes to MYOB Retail Manager and enters a new sale. They search for or enter the customer details again and then add a sales line entry for the hiring of equipment. If the customer wishes to purchase any other products from the store, they need to add/scan the products to the order and set qty's for each, confirm price with the customer and complete the payment process.
7. Once payment is complete, the staff member gives a receipt to the customer for their reference. The staff member rips the Customer Copy of the Hiring contract and gives it to the customer whilst the Store Copy is filed in the Hired Out Equipment Folder.
8. The customer leaves the store with the hired equipment and any goods purchased.
9. The customer and their group enjoy their ski holiday using the equipment.
10. At the end of the holiday, the customer returns the equipment to the store with their Hiring Contract. The staff member will locate the Store Copy in the Hired Out Equipment Folder and manually tick off the equipment hired.

Considerations For A Customer / Guest

A Customer is the person who signs the Hiring Contract and is legally responsible for the Equipment on behalf of their group. This is why their address, phone and email details are recorded in the Hiring Contract. Other people in their group who use the equipment are recorded however this creates some issues for future hiring.

For instance, if a member of the group arrived to hire equipment for themselves, they are likely to advise the staff member they hired equipment before with another group and their settings are already in the system. As they were not the customer, the Filemaker program has a limitation whereby the staff member cannot easily search for the guest and locate their settings from a prior contract. Also, this person is not setup as a customer and their name, address, and email must be setup for them.

Ideally, when the guest was added to the first Hiring Contract, their first/last name is recorded as a Customer account with an incomplete status set. Ie, unregistered customer. If setup this way, the persons name and surname can be searched from the customer list to see if they are on a prior hiring contract.

Project Requirements

Deploy/discover the SQUIZZ.com Unimelb Open Source eCommerce Platform and evaluate the structure of the software stack.

==Develop the Ski Hiring Workflow into the SQUIZZ.com Unimelb Open Source eCommerce Platform project to replace the FileMaker Hiring system== and provide an online workflow for both Customers or staff members to complete.

Create/update installation and deployment documentation so that the application can be deployed for Rocky Valley for evaluation and testing purposes.

Setup the platform for auto-deployment and auto-scale using cloud orchestration.

Integration Requirements

The SQUIZZ.com team will setup a sandbox MYOB Retail Manager and connect it to the Unimelb Project and sync all relevant data (products, categories, pricing).

- The eCommerce Platform will send completed sales orders to Retail Manager
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Further Considerations

SQUIZZ.com will discuss with Rocky Valley how to handle the Retail Manager integration from a customer account perspective to ensure that the order flow happens correctly.

Team 1 Project

Develop user roles with admin level component enabled in the UI/UX. ==Develop Account Management and Customer Profile Groups with configurable attribute fields to be used for Customer Hiring DIN settings calculation.== Develop Customer/Guest registration workflow so that Customers can register online or in store via the same user interface.

Team 2 Project

Develop the Hiring Process for Customers online (Self Serve) and Staff Members (Customer Account Creation, contract lookup and switching). The hiring process will include POS barcode scanner for scanning Equipment Package or products into the hire process or the shopping basket (previously developed). Expand the checkout process to take POS payments and print a formatted receipt on screen or via a docket printer. Post the order to Retail Manager via SQUIZZ.com.

Team 3 Project

Develop Equipment Groups and Equipment Packages and stock Register based on products synced via SQUIZZ.com. ==Develop Hiring Equipment Register (stock in versus stock hired)== and Calendar functionality into the Hiring process so that Customers (restricted view) and staff members (full view) can view the schedule of available equipment packages as part of the Hiring process and this is enforced so that Equipment that is not in stock cannot be hired.

Key Expectations

- Existing documentation is updated and maintained and added
- Version control using GIT is applied
- The SQUIZZ team will act on behalf of the client and engage their input where required
- SQUIZZ.com will meet with the student group weekly where each person in the group will rotate leading the meeting
- Students correspond with SQUIZZ.com team on SQUIZZ.com
- Code must be commented whereby comments outline why choices were made as well as what the code snippet does
- Any changes to architecture or refactoring is to be presented for consideration by SQUIZZ.com and course coordinator.
- Students explore the business case and look for innovative ways to simplify workflows
- Motivational modelling, Entity Relationship, User Stories are recommend to help convey ideas during project scoping and development
- All teams are responsible for delivery of the Project. Functionality to be developed can be negotiated between teams to ensure that broader objectives are achieved and there is a balance of work being completed by all students.
- Every experiences a fun and engaging learning opportunity whilst engaging in customer and technical oriented communication for best practice ideation

Timeline

The project will be conducted in 3 sprints. The SQUIZZ.com teams will meet with students weekly.

Key dates:
 TBA