

# Final Viva



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# Aims & Objectives

*Hypothesis: Using a bespoke database application over pre-packaged solutions will improve the operations of a small business.*



## Aims

- Plan and develop a bespoke software business solution
- Conduct a literature review on content relevant to the topic
- Determine if the solution meets the requirements of the old system
- Evaluate the success of the new system based on its usability



## Objectives

- Collect and document the needs of the business in relation to the old system
- Assess which software packages and methods would be most appropriate for the development
- Design and build the system using the assessed software and methods
- Conduct interviews with employees to determine if the project was a success

# Case Study Findings

**1.0**

**Tarmac  
Business**

**2.0**

**Proveca Ltd**

**1.1**

## **Needs:**

- Remote access
- Cost saving
- Higher efficiency with operational aspects

**2.1**

## **Needs:**

- Granular data input
- Customer Portals
- Sensitive Medical Data



# Current Tools



Excel:

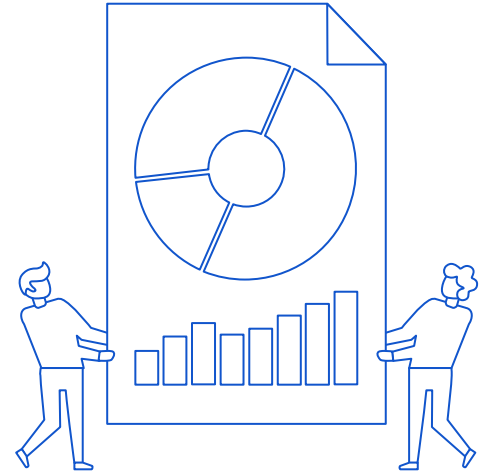
- Why its used
- Downfalls

Oracle:

- Why its used
- Downfalls

Other considerations:

- QuickBooks





# Pre-packaged

## Benefits

Try before buy

Tried and tested

Low initial cost

Functional for most solutions

## Drawbacks

Lack of control and flexibility

Lacking critical features

Bloat

Lack of complete solution



# Bespoke

## Benefits

Pandered to needs

Cost effective overtime

Long term scalability

On going support

## Drawbacks

Future vulnerabilities

Extensive research and prep

Costly additional development



# Client Requirement Discussion



What was discussed with the client:

- Issues with the old system
- Potential features
- Application vs Website based
- How the final product must function



See Appendix 1 for  
meeting translation



# Viable Development Strategies



**HTML & CSS**



**JavaScript**



**PHP Laravel**

Alternatives: CakePHP



# Frontend



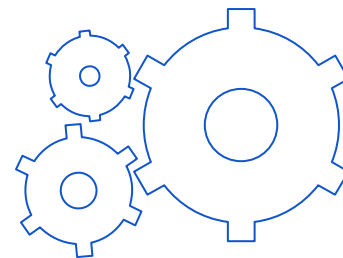
## CRAFTABLE

Chosen because:

- Supported client requirements
- Provided security for data
- Easy project implementation

CRAFTABLE offers:

- Login System
- Account Controls
- CRUD generation
- Record filtering and searching
- Translations manager
- Permissions



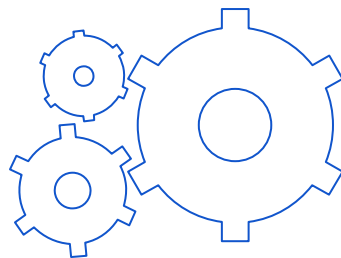


# Data Tables



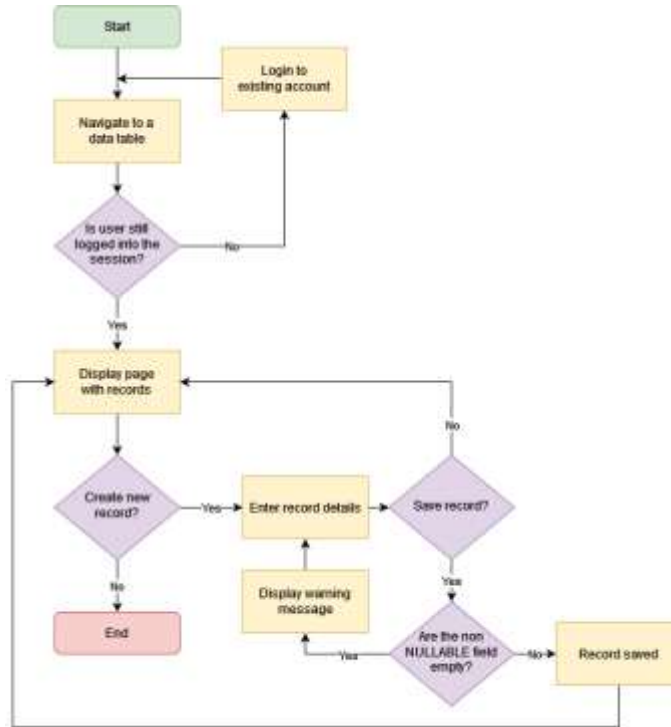
Development included data table creation

```
public function up()
{
    Schema::create('jobs', function (Blueprint $table) {
        $table->increments('id');
        $table->string('ref')->nullable();
        $table->string('customer_name')->nullable();
        $table->string('employees')->nullable();
        $table->date('start_date')->nullable();
        $table->date('end_date')->nullable();
        $table->string('payment_type')->nullable();
        $table->double('cost',8,2)->nullable();
        $table->double('deposit',8,2)->nullable();
        $table->double('balance',8,2)->nullable();
        $table->double('total_paid',8,2)->nullable();
        $table->boolean('paid')->default(false);
        $table->boolean('job_status')->default(false);
    });
}
```





# New Record Diagram



Create, Edit, &  
Delete follow  
similar structure

# Testing

## Functionality Testing

- Cross browser support
- Aspect ratio's
- Current feature testing
- Record creation, editing and deleting
- Search and filtering





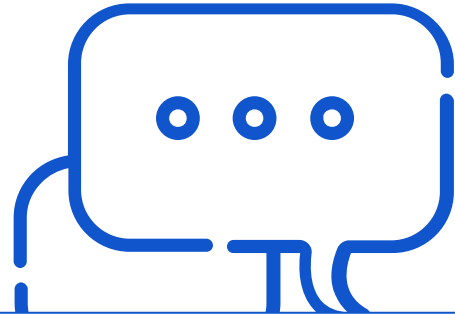
# Client testing and discussion



Client was given time to evaluate the system

Semi-Structured interview was conducted:

- What was asked?
- Why it was asked?
- Was the feedback a success?
- Was the project a success in the client's eyes?



See Appendix 2 for  
client discussion



# Project Conclusion



Were the Aims & Objectives met?



What went well?



What went badly?



Overall success?



# Recommendations



## Additional Features

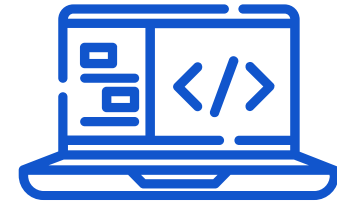
- Missing features
- Automation
- File upload support



## Other services

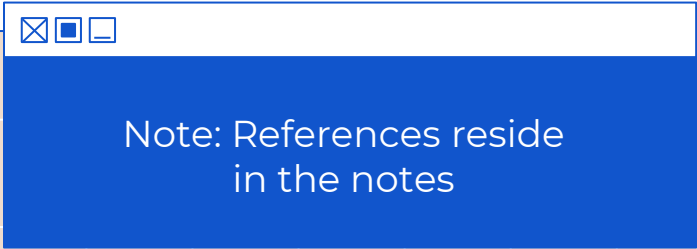
- Oracle

# Demonstration





# Questions?



Note: References reside  
in the notes



# Appendix



Note: Appendix in the  
notes