Pluckit

www.pluckit.com.au

Project Design Document

Abstract

The design document helps the web designer and development team to design and develop the website based on the project specification document.

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Table of contents

1. Overview

Pluckit is a tradie selecting platform where tradies can list their businesses and services so customers can pluck the recommended tradie.

The system offers users' friends recommendation based on their experience with specific tradies.

2. What does Pluckit mean?

Pluck means pick or quickly remove or select something.

Pluckit helps customers to quickly select a recommended and a trusted tradie based on their friend recommendation and experience.

3. How does Pluckit work?

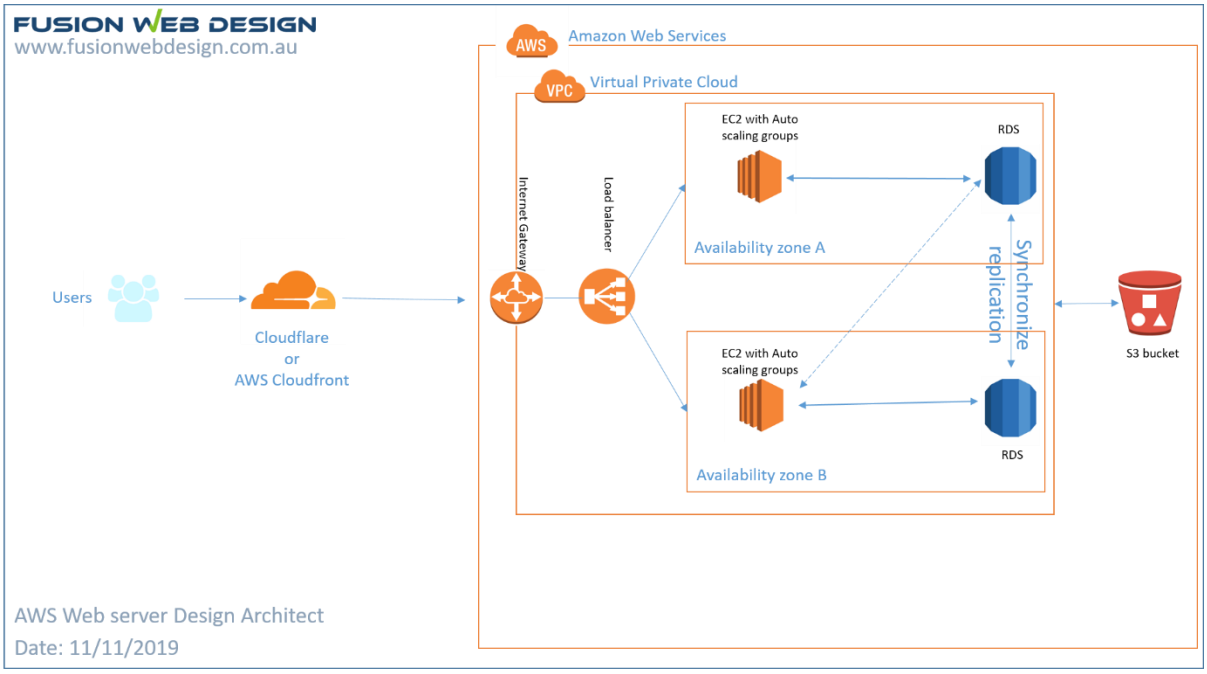
a. Tradies will be invited to list their profile, services, licenses, portfolio, reviews and their contact details.
b. Users will use the search function based on keyword and suburb/postcode.
    i. Upon clicking the search button, the system will recommend to login using Facebook, Gmail or Outlook to retrieve their friends recommendation.
    ii. Users are asked to login using Facebook, Gmail or Hotmail.
    iii. Once the user is logged in, the user will accept importing their friend list to Pluckit.
c. The system will list the top rated tradies based on user's friend recommendation.
d. User can contact the top three tradies via chat, sms, phone or email.
e. User can check tradie's rating, portfolio, services, etc.

4. Solution Architect

The solution below is the future proof design to provide high availability, security and auto scaling.

In order to keep the cost down we can rely on AWS EC2, MySQL and local data storage.

Once there is a need to introduce RDS or S3, we should be able to migrate all the data to AWS services from EC2.



5. Website Design

A. Logo: please create the logo based on the mock-up below:

B. Colour
   a. Primary: Hex: #EB503E (primary background colour of site)
   b. Secondary: Plain white writing throughout the site. It will be a nice contrast from the primary colour above. Hex #FFFFF
   c. Third: Hex #**F8C323**

C. Pages
   a. Home Page
   b. Search result page

c. Business page
d. Business profile
e. Tradie account management:
    i. Profile
    ii. Portfolio
    iii. Licenses
    iv. Reviews:
        1. Review summary
        2. Review management
            a. Import reviews:
                ✓Yelp
                ✓Trustpilot
                ✓Facebook
                ✓Google
            b. Pluckit tradie user's reviews:

f. Pluckit backend to manage:
    i. Tradies,
    ii. Users
    iii. Reporting/ Statistics
    iv. Payment
    v. Admin user management.

D. Highlighted features
    a. Instant search result
    b. Static Header with search fields
    c. Pluckit to receive direct debit payment. Payment gateway to be advised later.
    d. Smart search, more info can be found on the search page
    e. Call to action "List your business"
    f. User can leave a review under Business page/review section
    g. User friendly
    h. Mobile responsive
    i. SEO friendly
    j. SEO management from Backend
    k. Test Driven Development

6. SEO (Search Engine Optimization)

The website must be SEO ready and should cover not only the following requirements:

a. Mobile responsive
b. Page speed load must be under a second.
c. Minify html, javascript and css files.
d. Sitemap.
e. Robots.txt
f. readable url as per SEO rule.
g. setup the redirect of non www version to www version
h. Install Google Analytics
i. HTTP Status Code + Server Errors
j. Canonical tags and 301 to main page to avoid page duplicates.
k. No broken link
l. Internal Links and Anchor Text
m. breadcrumb
n. Tags on icons, pictures and pages
o. Headings in your Body Text (H1, H2's and H3's)

7. Security

In order to prevent data breaches and network **security threats**, the minimum attacks and threats to be covered. (**owasp top 10)**

a. Data protection:
   - ✓ In transit: using https. SSL certificate to be installed.
   - ✓ At rest: Encrypt stored data

b. Cross site scripting
c. Injection: SQL, Text, Html, host header
d. Password:
   - ✓ Password length and Password Security
   - ✓ Old password token should expired After generating new Token
   - ✓ Password policy checking
   - ✓ Special Character Should be restricted on username.
   - ✓ No rate limit on password reset.

e. ClickJacking (Xframe header)
f. Bruteforce on login
g. Session fixation.
h. Broken Authentication
i. Open re-direct
j. Email Spoofing
k. Parameter Tampering
l. SPF missing
m. Full path Disclosure.
n. SSRF(Server side request forgery)
o. Notification bell On email and password change
p. Directory transversal
q. DOS using Junk File JSON

8. Technologies

We would recommend to use the following technologies to provide a reliable, fast website and reduce the load and cost on the server.

a. Agile methodology
b. Framework: Laravel
c. Database: Mysql/AWS RDS
d. Database cashe: Redis or Memcached for database cashing.
e. Storage: As a start, data can be stored locally. However, the system must be ready to store data on AWS S3 buckets when is required.
f. Content delivery network (CDN): we will use Cloudflare

9. Layout

The mock-up below is just an idea of the content required. Please offer your best design and suggestions.

a. Home page

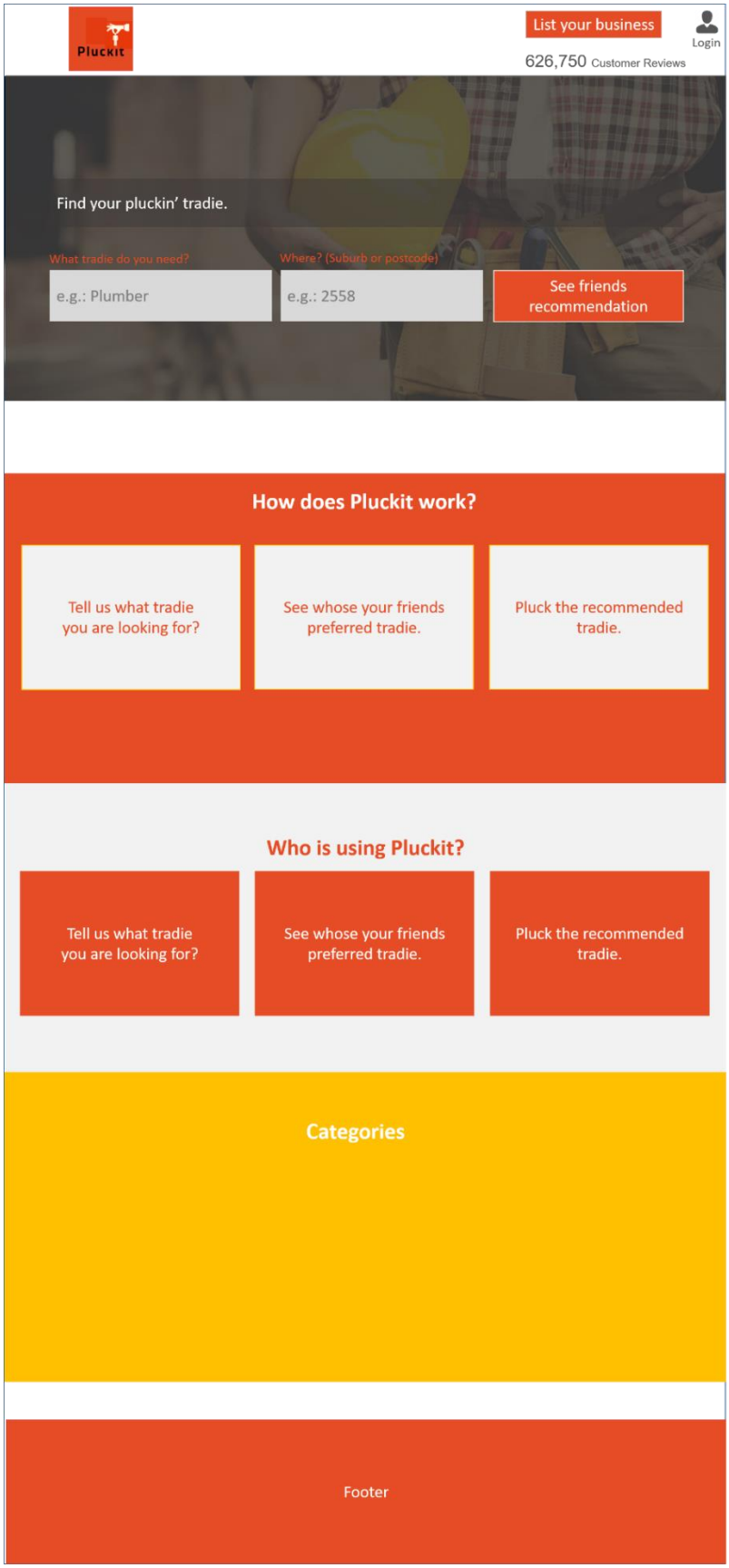


Figure 1:Home page

b. Search result page

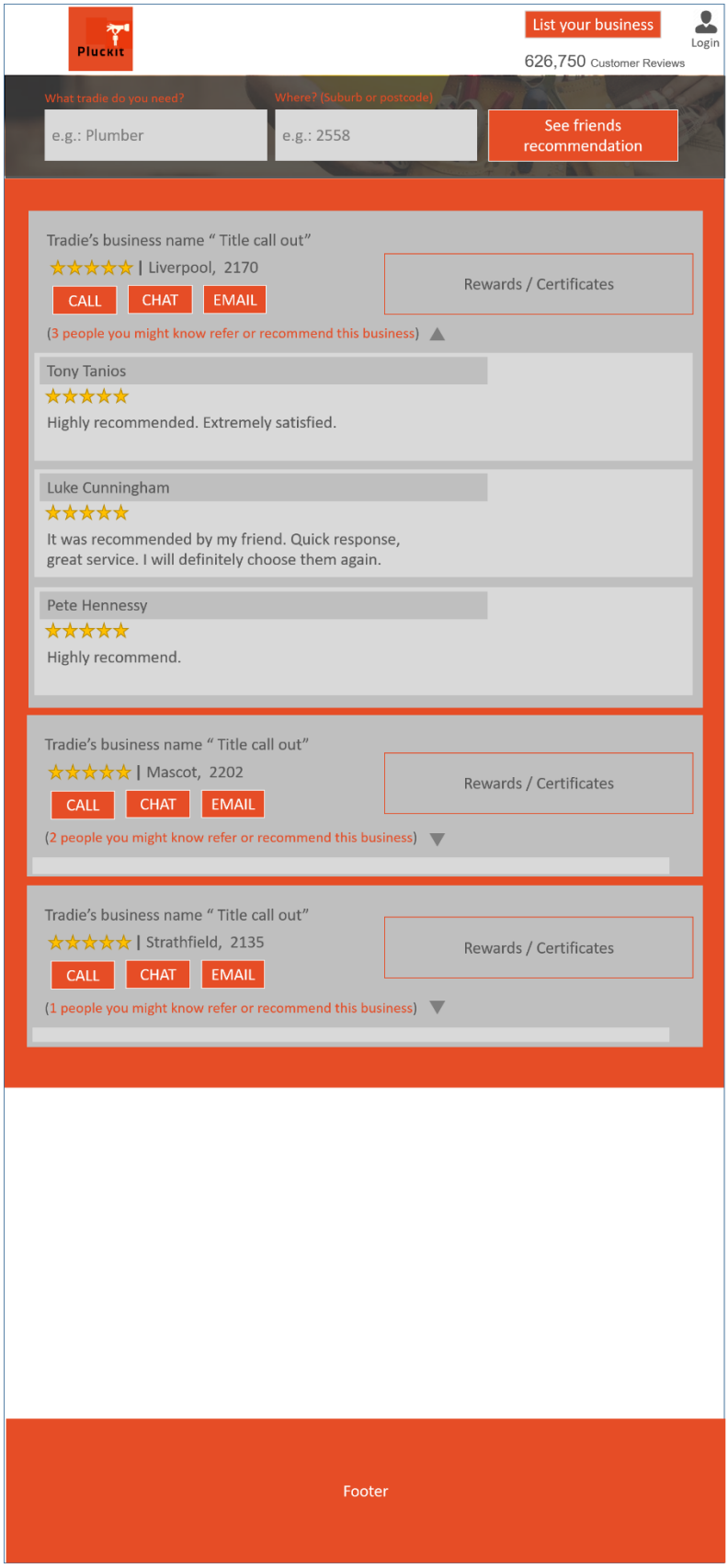


Figure 2: Search result page

c. Tradie business page

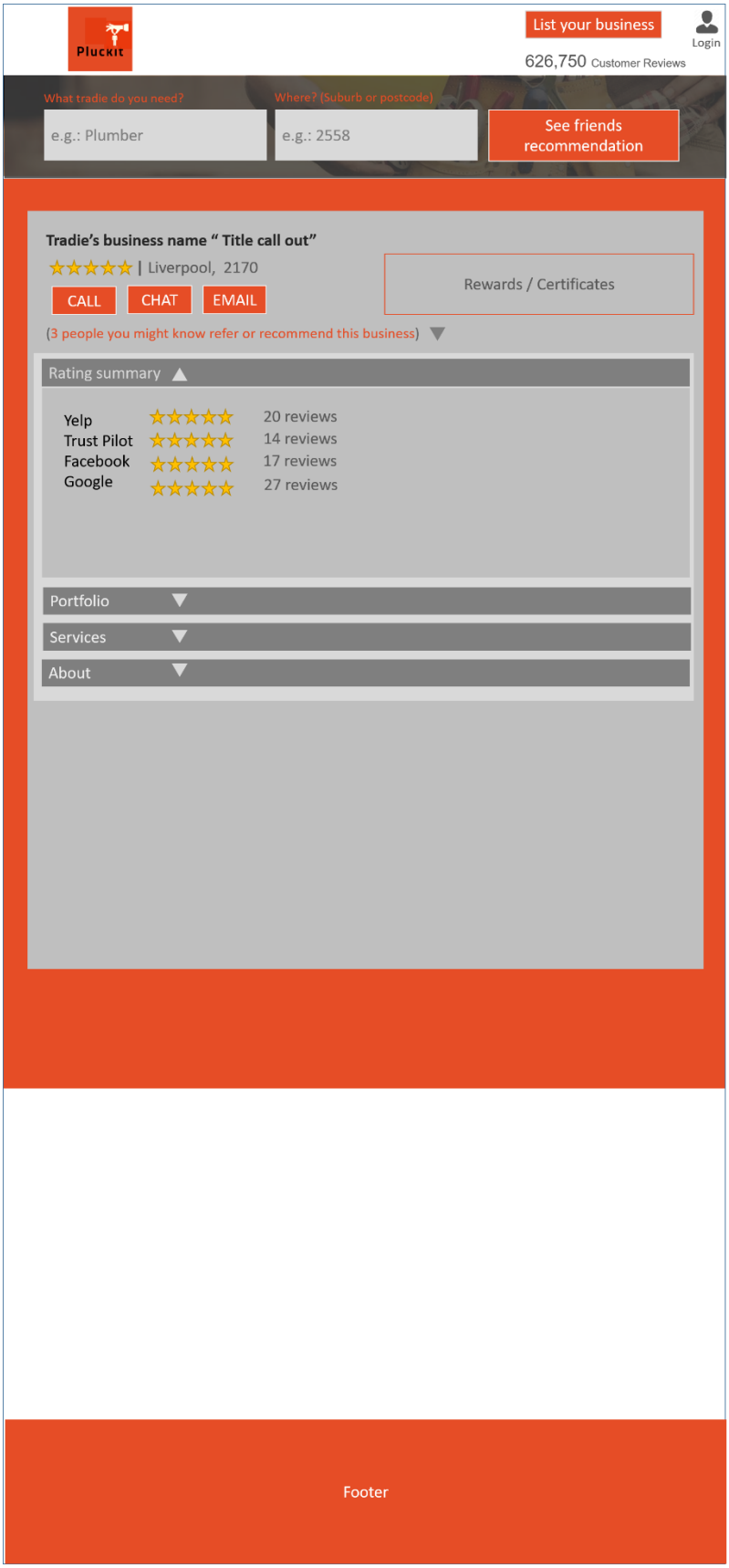


Figure 3: Tradie page

d. Tradie account manager
   To be sent later

e. Signup/Signin page
   To be sent later

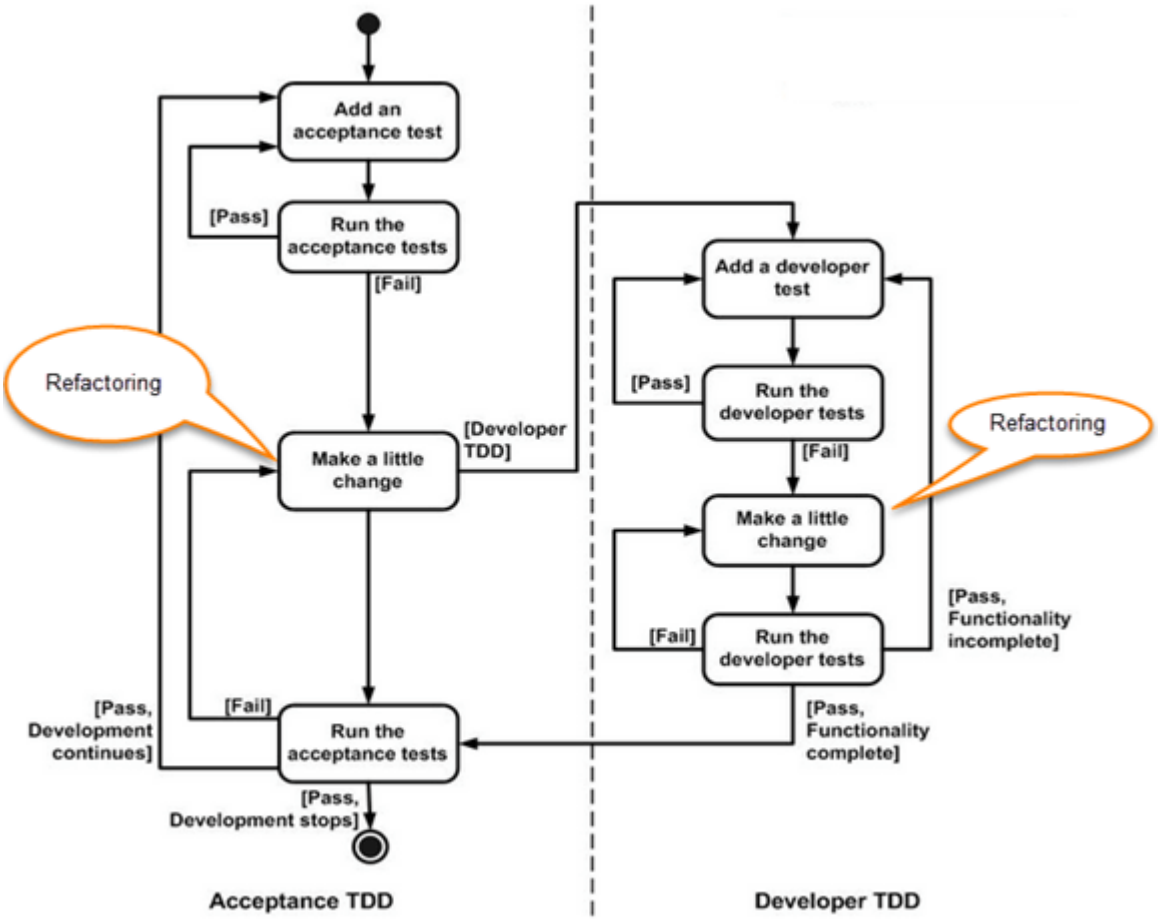
10. Test Driven Development

Test-Driven Development starts with designing and developing tests for every small functionality of an application. In the TDD approach, first, the test is developed which specifies and validates what the code will do. The primary goal of TDD is to make the code clearer, simple and bug-free.

TDD includes refactoring a code i.e. changing/adding some amount of code to the existing code without affecting the behaviour of the code.

In the code being written we require a test coverage of 75% minimum

Using ATDD and TDD approaches maintain the system behaviour whenever there is any change on the system.



A list of important features that must be covered will be shared before the development phase.