Bellevue University
CSD 460 Capstone
Group 3

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Provisio

Technical Design Document

Intro

1.1 Purpose

To build a website and database that supports Provisio's growing business needs as outlined in the requirements section.

1.2.a Terminology / Requirements

Provisio is a company that offers hotel accommodations for a number of locations. They are looking to have you build a website that manages the following:

Customers can view all aspects of the Provisio application without being logged in. To book their vacation (hotel reservation), they must be logged in/registered. In other words, to submit a reservation, prompt users to log in or register for a free account. There are no requirements for payment, but users must "click" a button to confirm their reservation. Once a reservation is confirmed, send the record to the database for insertion. The reservations you save in the database will be used to populate the "Reservation lookup page" and "Loyalty points page." All registered users should be saved to a table in the database. This table will be used during the login process to validate their access.

1.2.b Solution - Your Website

This is the kind of website you need developed:

Landing Page

Your home page needs to load fast, and needs to immediately provide the right information to your users.

It will have your company's color scheme, a modern design, and it will also have the full menu of your website.

About Us Page

This page is vital to create a connection with many customers. In it, users can see who's behind your business, and can put a face to the company.

Contact Us Page

Static HTML/CSS content related to the company, Provisio. This page will provide users with multiple ways to contact the company for their various needs.

Locations Page

Static HTML/CSS content related to the locations of the company, Proviso. This will highlight the different Provisio locations that users can book reservations with.

Registration Page

This is where users will register to be a Provisio member so they can take advantage of promos and loyalty points, there should be fields for email address, first name, last name, and password.
Additional comments:

- All customers should be assigned a unique customerId. This will be used in the loyalty points page.
- All customers should use their email address as the "username" field and the password should be at least 8 characters in length and include one uppercase and one lowercase letter (hint: use regular expression).
- Passwords should be hashed and/or encrypted using standard security practices (use the Internet for ideas/code snippets; be sure to cite all external authors).

Login Page

This page will be used to validate members so they can access other parts of the website. Provide customers with a login form and fields for username (use email address) and password.

Logged in customers should be added to the application's session.

Hotel Reservation Page

Hotel reservation (book your vacation) page:

- A hotel reservation page that allows customers to "book their vacation." MySQL will be used to save the data.
- Form selection options: room size, amenities, number of guests, and check-in/check-out dates.
- Additional comments:
    - Room size: double full beds, queen, double queen beds, and king.
    - Amenities: WI-FI (12.99 flat fee), breakfast (8.99 per night), and parking (19.99 per night).
    - Guests: 1-5; 1-2 guests are 115.00 per night; 3-5 guests are 150.00 per night.
    - Loyalty points: 150 per night.

Reservation Summary Page

This page provides customers with a reservation confirmation summary and a button to either cancel or submit the reservation. Submitted reservation will be saved to MySQL. Canceling the reservation will take users back to the hotel reservation page.

Customer Look Up Page

This page provides customers with a page to look up previous reservation. The page will include a field to search by reservation ID and display a summary of the reservation. It will list the location, room size, number of guests, amenities, and check-in/check-out dates.

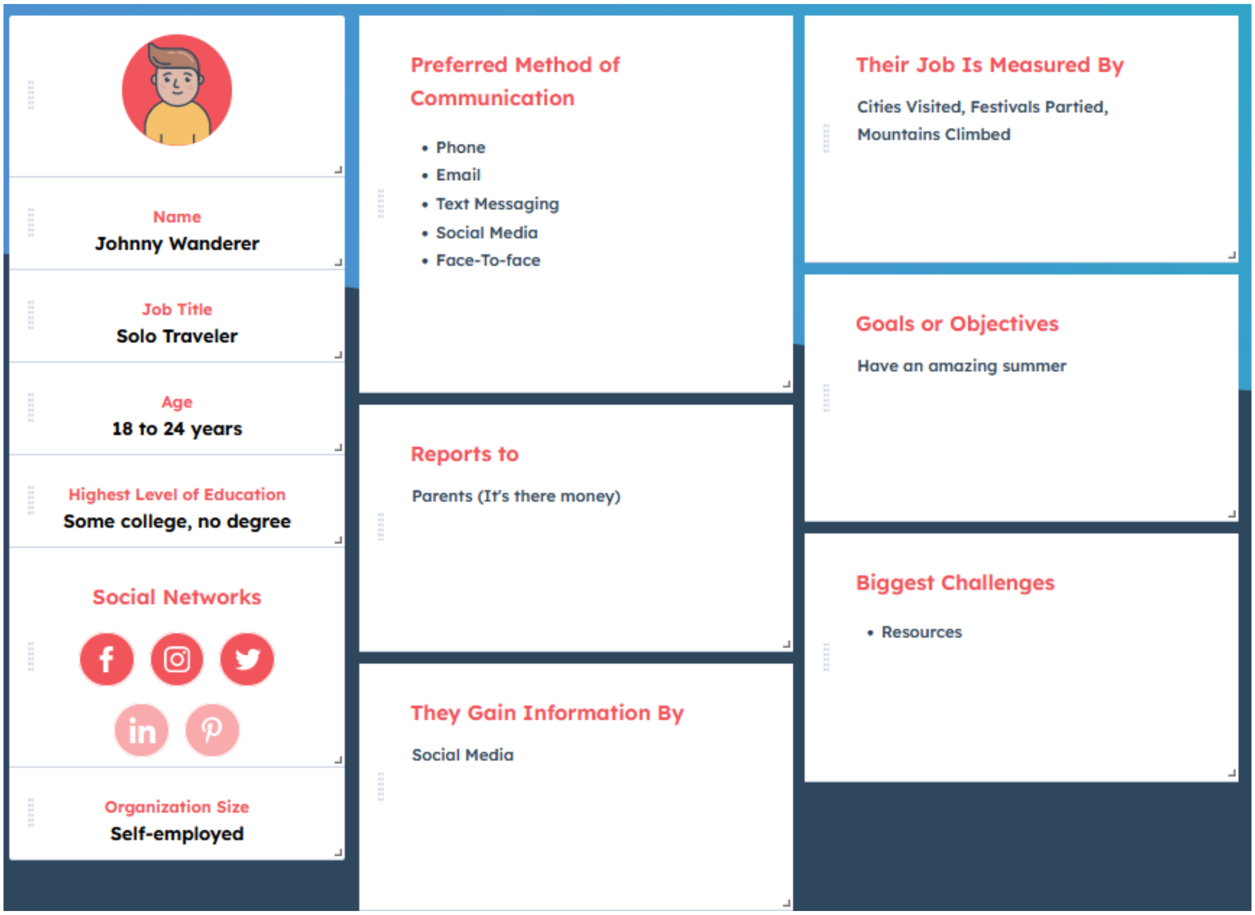
Customer Loyalty Points Tracking Page

This page provides customers with a page to look up how many points they have earned. Displays a table of data with columns for reservationId, location, check-in date, check-out date, and points earned, as well as total points earned.

1.2.c Technical Details

Front End: HTML, CSS, JavaScript and JSP files
Backend: Java
Database: MySql
    Database Name: provisio
    Database User: root
    Database Password: password

1.3 User Personas



Name
Johnny Wanderer

Job Title
Solo Traveler

Age
18 to 24 years

Highest Level of Education
Some college, no degree

Social Networks

Organization Size
Self-employed

Preferred Method of Communication

- Phone
- Email
- Text Messaging
- Social Media
- Face-To-face

Reports to

Parents (It's there money)

They Gain Information By

Social Media

Their Job Is Measured By

Cities Visited, Festivals Partied, Mountains Climbed

Goals or Objectives

Have an amazing summer

Biggest Challenges

- Resources

Ada Wilson

Job Title
Community Banker

Age
25 to 34 years

Highest Level of Education
Associate degree (e.g. AA, AS

Social Networks

Industry
Bank

Organization Size
11-50 employees

Preferred Method of Communication

- Phone
- Email
- Face-To-face

Tools They Need to Do Their Job

- Accounting and Bookkeeping Systems
- Content Management Systems
- Cloud-Based Storage & File Sharing Applications
- Word Processing Programs
- Business Intelligence Dashboards
- Reporting Software
- Invoicing Software
- Email
- Employee Scheduling Software

Job Responsibilities

Handles customer requests through email and phone including password resets, ACH and other documentation

Their Job Is Measured By

Opens a variety of new accounts for clients including checking, savings, IRA, CD, etc

Jamie Smith

Job Title
Sales Rep

Age
35 to 44 years

Highest Level of Education
Master's degree (e.g. MA, MS,

Social Networks

Industry
Sales

Organization Size
1001-5000 employees

Preferred Method of Communication

- Phone
- Email
- Face-To-face

Tools They Need to Do Their Job

Internet Connection
Email
PC

Their Job Is Measured By

Product Sales

Job Responsibilities

Sell Product

Goals or Objectives

Expand Network
Sell Sell Sell

Reports to

Director

1.4 User Stories

1. As the Solo Traveler, I need to be able track all of my upcoming trips, so that I can be sure not to miss any of my reservations.

2. As the Solo Traveler, I need to be able to see all of my past trips which I have taken, so that I can provide that info to my parents so they know I am not wasting their money.

3. As the Solo Traveler, I need to be able to change a reservation on short notice, so that if I decide to stay somewhere longer that won't be a problem.

4. As a business woman, I need to have a rewards/loyalty system, so that I can get discounts on reservations the more I book/stay.

5. As a business woman, I need to be able to look up my reservations, so that I can see which reservations I have already booked.

6. As a business woman, I need all of my information to be saved within my profile, so that I do not have to re-enter every time I make a new reservation.

7. As a Mother, I need to find a room with enough beds, so that my family can all stay in one room.

8. As a Mother, I need an account, so that I can reserve rooms early.

9. As a Mother, I need to see the room prices, so that I can determine how many nights to stay.

1.4.b Accessibility

We made sure to use best practices so that screen readers would work as someone would need them to for full accessibility. We included responsive design principles to ensure usability on all types of screens and devices.

1.4.c Assumptions

- TBD

1.5 Work Estimates

- **Week 1**
  - TDD- Complete first section of the technical design document to include purpose, terminology, user personas, user stories, and work estimations.
  - Github- set up and test team Github environment to include team Kansan board.
- **Week 2**
  - Create Functional Prototypes
    - Landing Page
    - About Us Page
    - Contact Us Page
    - Locations Page
    - Registration Page
    - Login Page
    - Hotel Reservation
    - Reservation Summary Page
    - Reservation Look Up Page
    - Customer Loyalty Points Tracking Page
- **Week 3**
  - Create ERD
  - Create DB
    - Populate Tables
    - Take screen shot of populated tables and submit to team lead
- **Week 4**

- Create Landing Page with backend code
    - Create 2 functional tests
    - Run tests, Take Screenshots, Submit to Team lead
- Create Login Page with backend code
    - Create 2 functional tests
    - Run tests, Take Screenshots, Submit to Team lead
- Create Registration Page with backend code
    - Create 2 functional tests
    - Run tests, Take Screenshots, Submit to Team lead

- **Week 5**
    - Create Reservation Page with backend code
        - Create 4 functional tests
        - Run tests, Take Screenshots, Submit to Team lead
    - Create About Us Page with backend code
        - Create 2 functional tests
        - Run tests, Take Screenshots, Submit to Team lead
    - Create Reservation Summary Page with backend code
        - Create 2 functional tests
        - Run tests, Take Screenshots, Submit to Team lead
- **Week 6**
    - Create Contact Us Page with backend code
        - Create 2 functional tests
        - Run tests, Take Screenshots, Submit to Team lead

    - Create Look Up Previous Reservation Page with backend code
        - Create 2 functional tests
        - Run tests, Take Screenshots, Submit to Team lead

- **Week 7**
    - Create Loyalty Points Page with backend code
        - Create 2 functional tests
        - Run tests, Take Screenshots, Submit to Team lead
    - Create Locations Page with backend code
        - Create 2 functional tests
        - Run tests, Take Screenshots, Submit to Team lead
- **Week 8**
    - Create Presentation with slides for each of the following:
        - Introduction of Team
        - Sample Prototypes
        - ERD
        - Description of at least five (5) tests created, and results of those tests
        - Lessons Learned
    - Screen capture of live site, depicting the functionality of the following:
        - Landing Page
        - About Us Page
        - Contact Us Page
        - Locations Page
        - Register Page

        - Login Page
        - Reservation Page

- **Week 9**
    - Provide Peer Feedback on other 2 groups
    - Iterate on Web App using peer feedback
    - Create one-page lessons learned document

Design

2.1 Prototypes

- TBD

2.2 ORD

- TBD

QA Testing

3.1 QA Test Plan

- TBD