Team JavaBean Project Proposal

# Project Overview

This is a system used by dental clinics, patients, insurance companies throughout the whole reservation, treatment, referral and payment process. The problem is that there are too many insurance plans and too many dental clinics for patients, so this system mainly wants to find a method to help them find best fit. Also, we want to find a way to keep all the patients’ personal information and medical / treatment history so that they can be referred to another organization easily.

# Application Key Functionalities

1. Patients
   1. Search dental clinics and compare treatment fees
   2. Make appointment and view appointment schedule
   3. Review after clinic visit
   4. Search and compare insurance plans
   5. Submit insurance policy application
   6. Review and recommendation for insurance policy bought
   7. Make inquiries about dental treatment or insurance plan directly to the clinic receptionist or insurance customer service representative
2. Dental Clinics
   1. Receptionist
      1. Confirm or reschedule an appointment
      2. When a patient arrives, check the patient in and inform the related doctor
      3. Confirm referred patients and make appointments for them
      4. Reply to patients’ inquiries
   2. Dentist
      1. Make treatment plan
      2. Treat the patient and write appointment note
      3. Make X-ray shot
      4. Send denture or crown order to dental labs
      5. Refer patient to dental specialist of another clinic
   3. Manager
      1. Confirm bill and send bills to patients or insurance companies and track the payments status
      2. Upload treatments provided and their fees to the system
3. Insurance Companies
   1. customer service representative
      1. Reply to the customers’ inquiries
   2. Policy Manager
      1. Approve or reject policy application
   3. Finance Manager
      1. Confirm and pay the bills from clinics
      2. Track the customer payment information
   4. Product Manager
      1. Upload insurance plans information to the system

# Proposed Entities

1. Patients
   1. Personal Information
   2. Medical History
   3. Directory of Treatment Plan
   4. Directory of Appointment
   5. Directory of Insurance Policy
2. Dental Clinics
   1. Directory of Patient
   2. Directory of Appointment
   3. Directory of Employee
   4. Employee
      1. Personal Information
      2. Role: Receptionist, Manager, Doctor …
   5. Treatment History (Directory of Appointment note)
   6. Appointment note
   7. X-ray record
   8. Treatment and Fees
3. Insurance Companies
   1. Directory of Customer (Patients)
   2. Directory of Policy
   3. Policy
   4. Payment History (Directory of Payment History)
   5. Insurance products and coverage

# Eco-system architecture diagram

