

Product Design Task

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Problem Statement

As a Product Designer, Build an Appointment Management App to enable doctors/Physicians to manage calendar as per availability and manage appointment request from external sources for multiple locations

Vision

To build a simple appointment management app to let the user manage appointment schedules efficiently with minimal customization

Goal

As per the Pain Points of Doctors/Physicians, the App would only include required features focused on user's basic requirements

Market Scenario

- Major competitors are Calendly, Google Calendar, HubSpot meetings, Acuity etc.
- Existing features
 - Calendar Sync
 - Payment Integration
 - Custom Booking link
 - Third Party Integration (External Lead like Practo / Video conference platform like Zoom)
 - Event Customization
 - Auto Scheduler
 - CRM Integration
 - Team/Admin Management

User Persona

Julia Gilbert

Age: 47

Work: Psychologist/Therapist

Location: Dublin

Family: Mother of Two



Julia works at St. Patrick's University Hospital at Dublin. She also work with Patients at her home clinic and through online sessions. Taking care of two kids at home, She only works with few patients outside Hospital due to availability issue.

Motivation:

- Convenience of use
- Spending time at home

Wants:

- To be able to help more patients with therapy
- To have flexible scheduling system to manage any unavailability

Frustrations:

- Too much time spend on calls while setting appointments
- Needs a flexible Scheduling automated to her needs

Ajay Patel

Age: 35

Work: Dentist

Location: Bangalore

Family: Single

Bio:

Ajay works at City Hospital at Bangalore. During Weekends he goes to a clinic at Doddaballapura. In his free time, He involves in a debating club near his house. He also likes to learn new skills outside of his work.

Motivation:

- Accessibility
- Efficient use of time

Wants:

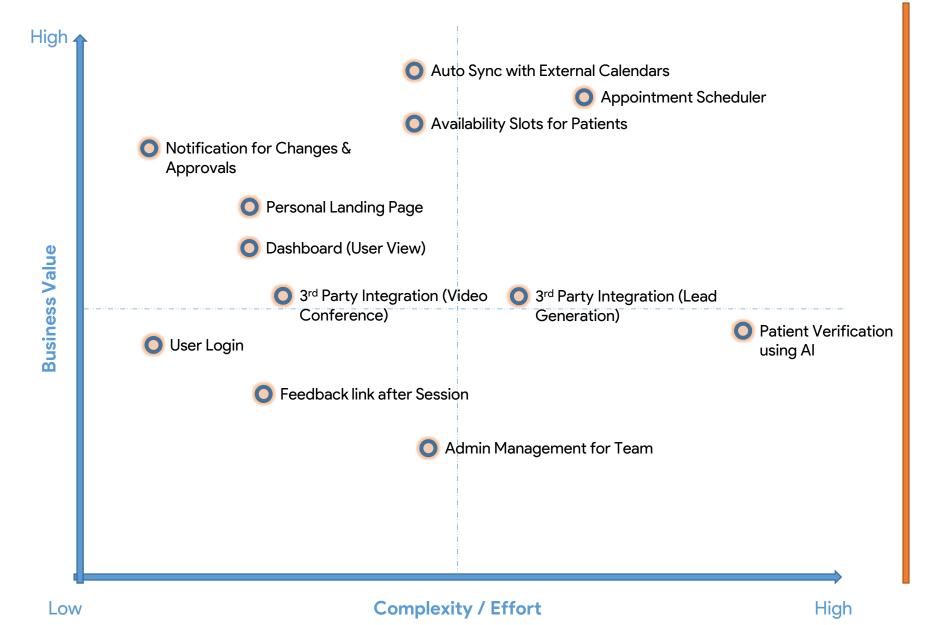
- To have all the schedules at one place
- To have direct feedback from patients to reduce multiple visits to Hospital/Clinic

Frustrations:

- Different Calendars for different work locations
- No single solution for Managing all his schedules effectively while getting direct feedbacks

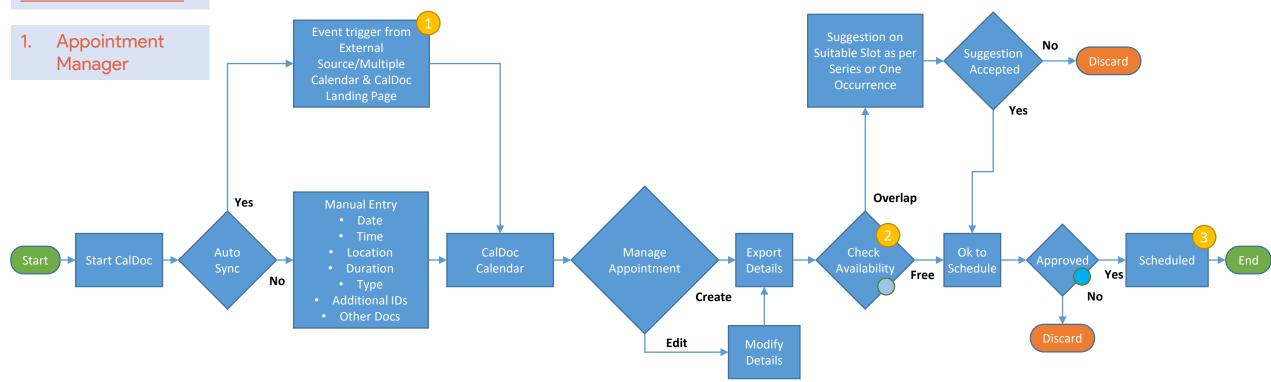
Feature Priority Matrix

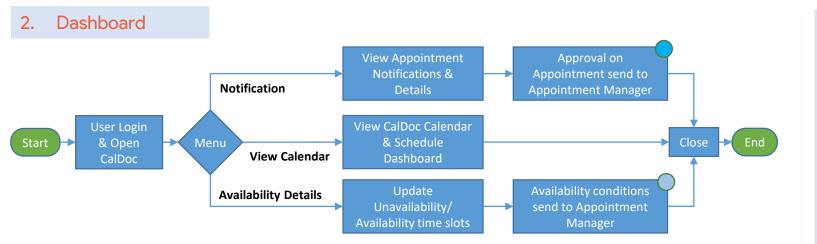
Feature Roadmap



- User Login
 - Auto Sync from External Calendar
 - Availability Slots for Patients
 - Appointment Scheduler
 - Notification for Changes & Approvals
 - Personal Landing Page
- 3rd Party Integration (video conference)
 - Dashboard (user view)
 - 3rd Party Integration (for lead)
 - Admin Management
 - Feedback link after Session (to user mail)
- Patients verification using Al

User Workflow





Notes:

- 1. External Source includes following:
 - Third Party Sites like Practo, Lybrate etc.
 - Event Sync from Multiple Personal mail Ids or different work mail Ids (From Both Google & Teams Calendar)
 - Leads from CalDoc Landing Page
- Availability Check: As per the Availability Hours & Conditions given by User, Conditions checked against Appointment details
- In Scheduled Phase, CalDoc can create Video conference link as per the Main email ID or User Preference settings

User Interface

Landing Page for Appointment Booking



User View (Doctor / Physicians) User Profile (Settings, Preference, Log Out) Burger Menu (Dashboard, Availability, Notification) (ii) Slot/Calendar View ((v) Date with Side Scroll Slot Calendar (v)Slot Details with Location 3 July 4 July (iv) (v) Appointment Details (Patient) 10:00 AM 10:30 AM City Hospital (V) City Hospital (VII) Past/Relevant Medical Reports Name: (vii) Approve to Schedule button Age: Mobile No: **Email ID:** caldoc.com/login/ajay-patel/dashboard (VI) @gmail.com Dashboard Availability Notification 6 Appointment Reason: Calendar 3 July 4 July @gmail.com Appointment Reason: 10:00 AM City Hospital **Documents:** 10:30 AM City Hospital (VII) Report.pdf Approve to Schedule (VIII) Approve to Schedule

High-Level User Stories and Test Cases

User Story 1 As a User, I want all my event Calendars & Third Party Appointment bookings in One Calendar so that I don't have to go through different calendars or Platforms to schedule my day.

Acceptance Criteria 1

While Opening CalDoc Calendar, It has been updated with Latest changes from all the linked external sources

Acceptance Criteria 2

Data export access is available for all external resources and Sync is actively fetching data

Acceptance Criteria 3

Any Changes in Availability slots is correctly reflecting on 3rd Party Platform used for discovery and Appointment booking

Test Case 1

Check Sync access, update & export features

Precondition: User has already created CalDoc account using One Mail ID **Assumption:**

- · Availability Slot has been created by User
- Sync access to External Calendar & Third Party websites are given

Test Steps:

- User logged into CalDoc using Primary Mail ID
- 2. Linked 4 separate Google Calendar to CalDoc
- 3. Logged into Second Google Calendar, Create a event with family member overlapping existing appointment slot
- 4. Logged into third Calendar and Remove sync access directly from external Mail settings

Expected Results:

- CalDoc shows unified calendar with separate Tag for each external source
- For 3, CalDoc notifies User with existing appointment details to cancel and communicate to patient
- User Notified warning about Access removal and Show link as inactive

Test Case 2

Check Booking export features from Third Party Platforms

Precondition: User has already created CalDoc account using One Mail ID **Assumption:**

- · Availability Slot has been created by User
- Sync access to External Calendar & Third Party websites are given

Test Steps:

- Patient A booked appointment through Practo
- 2. While uploading Document, Patient uploaded an excel file. (Not supported in CalDoc)
- 3. User Logged into CalDoc
- 4. Updated an Appointment booking Manually by entering individual details
- 5. User Approved both the bookings

Expected Results:

- CalDoc Successfully updates Calendar as per Data received from Practo
- Unsupported Document shared notified to User (Doctor)
- Practo Timeslots updated as per Manual change in CalDoc & Reflecting correctly

High-Level User Stories and Test Cases

User Story 2 As a User, I want to check the appointment details and approve the schedule in a single click so that I don't spend my time creating new events & updating old ones on daily basis.

Acceptance Criteria 1

All the Appointment details are exported correctly and available on Application to review

Acceptance Criteria 2

Approve the schedule button is working & any changes communication will be received by Patient's Phone or Mail ID

Acceptance Criteria 3

Documents including PDF, PNG, JPG, TIFF, ZIP, Drive links are uploaded successfully and accessible from user's end

Test Case 1

Check Ideal/Happy User workflow

Precondition: User has already created CalDoc account using One Mail ID **Assumption:**

- Availability Slot has been created by User
- Sync access to External Calendar & Third Party websites are given

Test Steps:

- 1. User Logged into CalDoc using Mail ID
- 2. Clicked on Slot view
- 3. Clicked on Specific Slots to Open Details tab
- 4. Review Appointment details
- 5. View Attached Document
- 6. Click schedule button to schedule the session

Expected Results:

- Appointment Details are filled and showing in details with attached document
- By Pressing Schedule Button, Session is confirmed and Communicated

Test Case 2

Check if Appointment details breach the data constraints, User is getting the Appointment prompt or not

Precondition: Patient already has Landing Page link of the Doctor **Assumption:**

- Availability Slot has been created by User (Doctor)
- Sync access to External Calendar & Third Party websites are given

Test Steps:

- 1. Patient opened the CalDoc Landing page
- 2. Clicked on Preferred time slot with location
- 3. Filled in details (Not filled Contact information)
- 4. Uploaded an Html document as Past report
- 5. Clicked on Submit button

Expected Results:

- Warning Remark showing Contact information is mandatory on top of page and about unsupported document
- Submit button should remain inactive
- No Appointment information to be created for User

Patient's Frontend High-Level Mobile web Landing **System Architecture** Page **External Calendars** Like Google Calendar, Teams **External Access** Desktop Protocol **Application** Desktop Landing Central Server 1 Central Server 2 Page <u>App</u> 2 July 3 July 4 July Appointment **Protocol** Editor, Backup Dashboard, Manager Appointment **Roll Forward Recovery** Schedule System Third Party Sites like Protocol Practo / Lybrate ODBMS 1 Patients / **System Kernel** <u>App</u> **Family Users** 2 July 3 July 4 July **Protocol** (Doctor / 10:30 AM City Hospital **Automated Alert** Physicians / Protocol Team) Appointment Editor, **Patient Communication** Dashboard, Manager Channel **Mobile Application**

Thank You.