

1. **Project ID** : ITP\_IT\_101
2. **Project Title** : Tour Operator Management System (TOMS)
3. **Campus** : SLIIT Main Campus, Malabe
4. **WD/WE** : Weekend

**5. Group Information:**

 Stream: **Y2.S2.WE.IT.0101** (ITP\_IT\_101)

	Registration Number	Student Name	Phone Number	Signature
01	IT24100923	Nawarathna K.M.G.D.I.	070-3159996	
02	IT24100559	Wasala W.M.S.S.B	070-4239802	
03	IT24102016	Melisha L.R.L	076-7281787	
04	IT24100220	Sanujan N.	076-9172276	
05	IT24102586	Luxsana S.	077-5799687	
06	IT24101070	Muthubadiwila M.W.H.A	074-3307949	

**6. Client Information / Project Justification**
**A. Project with a Client:**
**Client Name/ Organization:** W.M. Sajana Tharuka

**Contact Person & Designation:** Owner

**Email:** SajanaTharuka00@gmail.com

**~~B. Projects without a Client:~~**
~~— (Briefly justify the selection of the project title.)~~

## **7. A brief description of the problem.**

- Tourism work is done manually (calls, WhatsApp chats, notes, spreadsheets), so information is not in one place.
- Staff can miss customer messages/inquiries and reply late because there is no single system to track them.
- Manual tracking can cause double bookings / booking mistakes and customer confusion.
- Customer details (dates, pax, pickup, package/vehicle choice) can get lost or mixed up, so service quality drops.
- Payments are hard to track: advance paid, remaining balance, refunds can become unclear without proper records.
- The solution is one system where staff can manage data using CRUD (Add/View/Edit/Delete) and customers can send a full booking request via WhatsApp click-to-chat with a pre-filled message (user taps Send).

## **8. Main Features of the Proposed System.**

	Registration Number (Same order as above)	Name of Feature/s	<b>Brief</b> description of feature(s) in point form
1	IT24100923	Account Management	<ul style="list-style-type: none"> <li>• Keep staff login accounts and customer details in one place + <b>show special offers and new updates to customers</b>.</li> <li>• CRUD: Add staff/customers, view/search profiles, edit details/roles, disable/delete accounts + <b>add/view/edit/delete notifications</b> (offers/updates/booking alerts).</li> <li>• Unique: Admin/Staff permissions + customer booking history link + <b>Notification Center</b> (customers can see updates; staff can publish them).</li> </ul>
2	IT24100559	Products & Content Management	<ul style="list-style-type: none"> <li>• Control what shows on the website: tour packages + destinations + FAQs + testimonials + gallery/blog + <b>“Build Your Own Tour” (map plan)</b>.</li> <li>• CRUD: Add/view/edit/delete website items + add/view/edit/delete district best-places and saved custom plans.</li> <li>• Unique: Draft/Published to show/hide items + <b>Map-based custom plan</b> where users click a district on the map and select best places (Leaflet GeoJSON click).</li> </ul>
3	IT24102016	Vehicle Fleet Management	<ul style="list-style-type: none"> <li>• Manage vehicles for tours and vehicle-only service with rates and availability.</li> <li>• CRUD: Add vehicles, view/search fleet, edit rates/seats/status + add/view/edit/delete blocked dates (vehicle unavailability).</li> <li>• Unique: Vehicle availability calendar that auto-blocks dates for confirmed bookings to</li> </ul>

			prevent double booking + status (Available/Maintenance/Unavailable) to avoid wrong assignments.
4	IT24100220	Booking & Reservation Management	<ul style="list-style-type: none"> <li>• Save booking requests (package/vehicle/custom) and track them until completed + <b>allow users to ask questions using a website chat box.</b></li> <li>• CRUD: Create booking, view details, update status/assign staff/vehicle, cancel/archive booking + <b>create/view/reply/close chat messages (support tickets).</b></li> <li>• Unique: WhatsApp booking button opens chat with a pre-filled message (wa.me + text=; user taps Send). + <b>Website support chat widget for quick Q&amp;A (embed like tawk.to).</b></li> </ul>
5	IT24102586	Finance Management	<ul style="list-style-type: none"> <li>• Record money for each booking: invoice/estimate, advance payment, remaining balance, refunds + downloadable receipts + admin finance reports.</li> <li>• CRUD: Add invoices/payments/refunds, view finance records, edit/void entries, delete incorrect records safely.</li> <li>• Unique: Auto-calculate paid amount and remaining balance + Download PDF receipt after payment (generated server-side) + Admin report export (CSV/PDF) from a route handler</li> </ul>
6	IT24101070	Supplier/Partner Management	<ul style="list-style-type: none"> <li>• Store partner details like guides/hotels/drivers and what services they provide.</li> <li>• CRUD: Add partners, add services with rates (rate cards), view/search list, edit contacts/rates/status, deactivate/delete partners/services.</li> </ul>

			<ul style="list-style-type: none"><li>• Unique: Supplier service rate cards + assign partners to bookings/packages (easy to choose the right partner for each tour).</li></ul>
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## [01] Account Management (Nawarathna K.M.G.D.I.)

**Brief:** This function is used to keep staff login accounts, customer details, and customer notifications in one place, so the business can manage bookings properly and share special offers/updates.

### CRUD Operations

- **Create:** Create staff accounts (Admin/Staff) and customer profiles. Create notification posts (offers, updates, alerts) with publish dates and visibility settings. (Rewrite in your own words with 1 real example.)
- **Read:** View/search staff and customers; open a profile to see contact details and linked booking history. View notification list and open individual notifications. (Rewrite in your own words with 1 real example.)
- **Update:** Edit customer contact details; change staff role; enable/disable accounts. Edit notification content and publish status; mark notifications read/unread for customers. (Rewrite in your own words with 1 real example.)
- **Delete:** Disable/soft-delete accounts to preserve system records (bookings, payments, audit). Archive/remove old notifications while keeping an internal record if required. (Rewrite in your own words with 1 real example.)

### Unique Features

- Role-based access control (Admin vs Staff) to prevent unauthorized edits. (Add: what problem it prevents / improves.)
- Notification Center: staff/admin can publish time-sensitive offers/updates and customers can view them in one place. (Add: what problem it prevents / improves.)
- Customer booking history link for faster support and decision-making. (Add: what problem it prevents / improves.)

### Key Outputs / Screens

- Searchable staff/customer directory. (Add: what the user sees/does here.)
- Customer profile with linked booking list. (Add: what the user sees/does here.)
- Notification feed with publish/unpublish controls. (Add: what the user sees/does here.)

## [02] Products & Content Management (Wasala W.M.S.S.B)

**Brief:** This function is used to manage what appears on the website like tour packages and other content (destinations, FAQs, testimonials, gallery/blog), and allow users to build a custom tour plan using a map.

### CRUD Operations

- **Create:** Add tour packages and content items with images and structured details. Add district best-places entries and allow users to save custom plan drafts.
- **Read:** View/search lists (packages, destinations, FAQs, etc.) and open details. View the district map, list best places for a selected district, and open saved custom plan drafts.
- **Update:** Edit package itinerary, pricing, and media; edit content text/images; switch Draft/Published. Update district best-places and edit saved plans (add/remove places, reorder days).
- **Delete:** Soft-delete/retire outdated packages/content. Soft-delete best-place entries and delete plan drafts (with rules: only owner can delete own drafts).

### Unique Features

- Draft/Published toggle to control what is visible on the public website.
- Map-based custom plan builder: user clicks a Sri Lanka district (Leaflet + GeoJSON) and the system shows best places for selection.
- Saved custom plans: users can build, revise, and reuse itineraries.

### Key Outputs / Screens

- Public website pages (packages, destinations, FAQs, testimonials, gallery/blog).
- Build Your Own Tour interactive map + district place lists.
- Saved custom plans list (per user).

### [03] Vehicle Fleet Management (Melisha L.R.L)

**Brief:** This function is used to manage the vehicles (cars/vans/SUVs) for tours and vehicle-only requests, including rates and availability.

#### CRUD Operations

- **Create:** Add vehicles with key specs and base daily rates. Create blocked-date entries when a vehicle is unavailable (manual block) or when a booking is confirmed (auto block). (Rewrite in your own words with 1 real example.)
- **Read:** View/search fleet by type/status; open a vehicle profile to see specs and calendar. Check availability for a given date range when assigning vehicles. (Rewrite in your own words with 1 real example.)
- **Update:** Edit rate/specs; change status (e.g., Maintenance). Add/remove blocked dates; update the calendar automatically when bookings are confirmed/cancelled. (Rewrite in your own words with real example.)
- **Delete:** Soft-delete/retire vehicles so old booking history remains valid; keep an archive for compliance and reporting. (Rewrite in your own words with 1 real example.)

#### Unique Features

- Availability calendar with blocked dates to prevent double booking. (Add: what problem it prevents / improves.)
- Status control (Available/Maintenance/Unavailable) to avoid wrong assignments and operational failures. (Add: what problem it prevents / improves.)
- Auto-block confirmed booking dates (system-enforced constraint). (Add: what problem it prevents / improves.)

#### Key Outputs / Screens

- Fleet list with filters and quick status indicators. (Add: what the user sees/does here.)
- Vehicle detail view with availability calendar. (Add: what the user sees/does here.)
- Availability check results for booking assignment. (Add: what the user sees/does here.)



## [04] Booking & Reservation Management (Sanujan N.)

**Brief:** This function is used to save booking requests (package/vehicle/custom) and track them until the trip is finished, and also allow customers to ask questions and get support inside the website.

### CRUD Operations

- **Create:** Create booking requests from the website (or from staff entry). Create support tickets/messages when customers ask questions through the website chat widget. (Rewrite in your own words with 1 real example.)
- **Read:** View booking list and details; filter by status/date; review notes and assignments. View support tickets, message history, and staff replies. (Rewrite in your own words with 1 real example.)
- **Update:** Update booking status; assign staff/vehicle; add operational notes; attach customer custom plan. Reply to tickets and change ticket status (Open/Replied/Closed). (Rewrite in your own words with 1 real example.)
- **Delete:** Cancel/archive bookings without losing records (soft delete). Archive/close tickets and remove spam tickets based on rules. (Rewrite in your own words with 1 real example.)

### Unique Features

- WhatsApp booking button opens wa.me with a pre-filled message (user taps Send) to reduce incomplete inquiries. (Add: what problem it prevents / improves.)
- Website support chat widget (ticketing/live chat) for fast Q&A and tracking of customer conversations. (Add: what problem it prevents / improves.)
- End-to-end booking status tracking to reduce missed messages and confusion. (Add: what problem it prevents / improves.)

### Key Outputs / Screens

- Booking dashboard with filters (status/date). (Add: what the user sees/does here.)
- Booking detail page (timeline, assignments, notes). (Add: what the user sees/does here.)
- Support ticket list with reply/close actions. (Add: what the user sees/does here.)

## [05] Finance Management (Luxsana S.)

**Brief:** This function is used to record money details for each booking like invoice/estimate, advance payment, receipt, and remaining balance (no online payment).

### CRUD Operations

- **Create:** Create invoice/estimate for a booking. Record payments (advance/full) with date/method and optional reference. Record refund entries when cancellations occur. (Rewrite in your own words with 1 real example.)
- **Read:** View finance summary per booking (total, paid, remaining) and payment history. View receipts and admin dashboards (monthly totals, pending balances). (Rewrite in your own words with 1 real example.)
- **Update:** Edit invoice when plan changes; correct payment entries (with audit notes); add refunds/adjustments and recalculate balances. (Rewrite in your own words with 1 real example.)
- **Delete:** Void incorrect finance entries safely (soft delete with reason) so reporting remains trustworthy. (Rewrite in your own words with 1 real example.)

### Unique Features

- Auto-calculation of paid amount and remaining balance per booking. (Add: what problem it prevents / improves.)
- Downloadable PDF receipts generated server-side after recording a payment. (Add: what problem it prevents / improves.)
- Admin report export (CSV/PDF) for income summaries, advance lists, pending balances. (Add: what problem it prevents / improves.)

### Key Outputs / Screens

- Per-booking finance summary (total/paid/remaining). (Add: what the user sees/does here.)
- PDF receipt after payment entry. (Add: what the user sees/does here.)
- Admin exports (CSV/PDF) for reporting. (Add: what the user sees/does here.)

## [06] Supplier/Partner Management (Muthubadiwila M.W.H.A)

**Brief:** This function is used to keep details of partners like guides, hotels, and drivers, and manage what services they provide for tours.

### CRUD Operations

- **Create:** Add partner profiles and define services they provide with rates (rate cards). Create links between partner services and packages/bookings when assigned. (Rewrite in your own words with 1 real example.)
- **Read:** View/search partners; open partner detail to see services, rates, and availability notes. View which partners are assigned to a booking/package. (Rewrite in your own words with 1 real example.)
- **Update:** Edit contact details, update service rates/terms, and change partner status (active/inactive). Update assignments if booking changes. (Rewrite in your own words with 1 real example.)
- **Delete:** Deactivate/soft-delete partners or services while keeping historical booking records consistent. (Rewrite in your own words with 1 real example.)

### Unique Features

- Supplier service rate cards (structured services + prices per partner). (Add: what problem it prevents / improves.)
- Fast partner assignment to bookings/packages through supplier-service linking. (Add: what problem it prevents / improves.)
- Status control to avoid selecting inactive partners. (Add: what problem it prevents / improves.)

### Key Outputs / Screens

- Partner directory with filters and detail pages. (Add: what the user sees/does here.)
- Rate card view per partner. (Add: what the user sees/does here.)
- Booking view showing assigned partners/services. (Add: what the user sees/does here.)