

REPRESENTATIVE TRACK AND TRACE APPLICATION SCOPE

This application, developed by Footys, is designed to track and monitor stock consumption and movement through product representatives across the country. The Reps Track and Trace Application features two interfaces:

- Admin Side
- User Side (Reps Side)

1. USER SIDE (REPS SIDE)

A product representative will access the Track and Trace application on their smartphone, downloaded via the provided link, and utilize it following the steps outlined below:

Step 1: The representative will log in to the application using the username and password provided by the application administrator.

Step 2: Upon successful login, the application will open to the home page, which includes:

- Representative's Name displayed on one side and the current date and time on the other.
- The main body of the application features three sections to choose from:
 - Previous Reports
 - Start a New Report
 - In Progress Reports

Previous Reports Section

The Previous Reports section will display a list of PDF reports previously generated by the representative. Each report will include the date and time it was saved, along with the following options:

- A Download button to save the report locally.
- A Preview button to open the PDF directly within the application for a quick view without downloading.

At the top of this section, there will be a Date Range Selector, allowing the representative to filter reports based on a specific date and time range. Once a range is selected, the application will display only the reports that fall within that range.

The availability of reports in this section, including how far back they can be accessed and the total number of reports displayed, will depend on the database and application capacity.

Finally, an Exit button will be provided at the bottom of the section, allowing the representative to return to the home page.



Start a New Report Section

The Start a New Report section will open a form for the representative to begin filling out, as outlined in the subsequent steps. This section serves as the core functionality of the application, reflecting the primary tasks of the representatives.

The form is structured into three distinct sections, organized by the following titles:

- Shop
- Shop-Store
- Main Store

In Progress Report

The In Progress Reports section displays all reports that have been started but not yet completed or submitted. Representatives will have the ability to edit or delete any report listed in this section.

THE FORM:

Shop Section

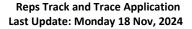
Step 3: The first field of the form requires the representative to enter the shop name for which they are conducting the evaluation. This field offers a dropdown menu containing previously saved shop names for easy selection. Additional features include:

- Search by Typing: The field allows filtering the list by typing letters.
- Add New Shop: If the desired shop is not found in the dropdown, a button labeled "Add Shop" is available to add a new shop.

Add Shop Process

Clicking the "Add Shop" button opens a new form where the representative is required to provide the following information:

- Shop Full Name
- Shop Full Address
- Shop Manager's Name and Surname
- Shop Contact Details (email and phone number)
- Shop-Store Manager's Name and Surname
- Shop-Store Contact Details (email and phone number)
- The form also includes a Save button that, once clicked, redirects the user back to the main form with the newly added shop now available in the dropdown list.





Important Note:

Representatives will not have the ability to edit or delete shop entries in the dropdown menu. These actions can only be performed by the administrator.

Step 4: The second field of the form will automatically pre-populate the shop's address, the third field will pre-populate the shop manager's name and surname, and the fourth field will pre-populate the shop's phone number.

These fields are dynamically filled based on the shop name selected in the first field, ensuring consistency and reducing manual entry errors

Step 5: The fifth field of the form will require the representative to record the name of the product being traced. Like the shop name field, this field will include:

- A dropdown list with pre-existing product names for easy selection.
- An option to add a new product name if it is not available in the list.

Once a product name is selected, it will also appear in the form's title section, ensuring clear identification of the report's focus.

Step 6: The sixth field will require the representative to capture a photo providing a clear view of the product on the shelf. The functionality will include:

- An option to upload or take a photo directly using the device's camera.
- The number of photos that can be taken will be determined during the development process, ensuring optimal usability without compromising performance.

Step 7: The seventh field will require the representative to enter the total quantity of the product available in the shop. This field ensures accurate tracking of product inventory at the specific location.

Step 8: The eighth field will present a Yes/No question:

"Based on the quantity of this product in the shop, do you need to top it up?"

- If the answer is "No", the form will skip the remaining fields under the Shop, Shop-Store, and Main Store sections. Instead, the form will proceed directly to the final section, displaying only the Save and Submit buttons, as the task is considered complete with everything in order.
- If the answer is "Yes", the rest of the form will dynamically populate, allowing the representative to complete additional fields required for managing the product restocking process.





Step 9: If the representative selects "Yes" for the above question, the remaining fields under the Shop and Shop-Store sections will populate, while the Main Store section will remain unpopulated. The ninth field will then require the representative to enter the final quantity of the product that they would like the shop to have. This ensures proper restocking and aligns inventory levels with the shop's requirements.

Step 10: The tenth field will automatically calculate and display the amount of product to be topped up. This value is determined by subtracting the current quantity of the product in the shop (Field 7) from the desired quantity the shop should have (Field 9).

Formula:

Top-Up Quantity = Desired Quantity (Field 9) - Current Quantity (Field 7)

This automated calculation ensures accuracy and eliminates manual errors.

Step 11: The final field of the Shop section will be a comment field, allowing the representative to add any remarks or additional information regarding the shop. This marks the end of the Shop Section. On the next line, the title for the next section, Shop-Store, will be displayed, indicating the transition to the following part of the form.

Shop-Store Section

Step 12 (Transition to the Shop-Store Section):

Upon leaving the Shop and moving to the Shop-Store section, the following fields will automatically prepopulate:

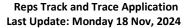
- **First Field:** The Shop-Store manager's name and surname will be pre-filled based on the data associated with the selected shop.
- **Second Field:** The Shop-Store contact details (phone number) will also be pre-filled for convenience and accuracy.

This ensures a seamless transition and reduces the need for repetitive data entry.

Step 13: The third field in the Shop-Store section will present a Yes/No question: "Is there enough stock in this shop-store to top up the amount required in the shop?"

- If the answer is "No", the Main Store section of the form will be added, allowing the representative to proceed with further steps to address the stock shortage.
- If the answer is "Yes", the Main Store section will not be added, as the stock in the Shop-Store is sufficient to fulfil the required top-up.

This conditional logic streamlines the process, ensuring that only relevant sections of the form are displayed based on the situation.





Step 14: Regardless of the response to the previous question, the fourth field in the Shop-Store section will require the representative to enter the total quantity of the product available in the Shop-Store. This field ensures accurate inventory tracking at the Shop-Store level, regardless of whether additional stock is needed from the Main Store.

Step 15: The fifth field in the Shop-Store section will require the representative to capture a photo of the shelf and any supporting evidence. This ensures visual documentation of the current stock status and provides additional context or proof for the report.

Step 16: The final field in the Shop-Store section will be a comment field, allowing the representative to add any remarks or additional information regarding the Shop-Store.

If the answer to Step 13 was "No", this marks the end of the Shop-Store section, and the Main Store section will immediately follow.

Step 17: If the answer to Step 13 was "Yes", the seventh field in the Shop-Store section will require the representative to enter the total quantity of the product taken from the Shop-Store. This field ensures accurate tracking of stock movement and updates the inventory accordingly.

Step 18: The eighth field will automatically calculate and display the total quantity of the product remaining in the Shop-Store.

This value is determined by subtracting the total quantity taken from the Shop-Store (Field 7) from the total quantity found in the Shop-Store (Field 4).

Formula:

Remaining Quantity = Total Quantity Found (Field 4) - Total Quantity Taken (Field 7)

This automated calculation ensures precise stock tracking in the Shop-Store.

Step 19 (Back to the Shop): The ninth field will require the representative to take a picture of the store shelf after restocking it with the amount collected from the Shop-Store. This visual documentation ensures accurate reporting and serves as proof of the completed restocking process.

Step 20: The tenth field will require the representative to enter the final quantity of the product now available on the shelf in the shop after restocking. This marks the end of the Shop-Store section.

- If the answer to Step 13 was "Yes", a comment field will appear below this step, allowing the representative to provide any additional remarks regarding the Shop.
- If the answer to Step 13 was "No", the form would have already transitioned to the Main Store section starting from Step 16.



Main Store Section (Triggered by Step 13 - "No")

Step 21 (Left the Shop section to go to a bigger store): If the answer to Step 13 was "No", indicating insufficient stock in the Shop-Store, the Main Store section will be added to the form.

First Field: Main Store Selection

- The representative will be required to enter the Main Store name where stock has been sourced for the shop they are working on.
- This field will include a dropdown menu with previously saved Main Store names for easy selection.
- The field also supports filtering by typing letters for quicker navigation.

Adding a New Main Store

- If the required Main Store is not available in the dropdown, a button labelled "Add Main Store" will allow the representative to add a new Main Store.
- Clicking the "Add Main Store" button will open a new form requiring the following information:
 - Main Store Full Name
 - Main Store Full Address
 - Main Store Manager's Name and Surname
 - Main Store Contact Details (email and phone number)
- The form will include a Save button that redirects back to the Main Store section, with the newly added store now available in the dropdown.

Important Note:

Representatives will not have the ability to edit or delete Main Store entries from the dropdown. These actions are restricted to the administrator for better control and data consistency.

Step 22: Once the Main Store name is selected in the first field, the following fields will automatically prepopulate:

- **Second Field:** The address of the Main Store will be pre-filled.
- Third Field: The Main Store manager's name and surname will be pre-filled.
- Fourth Field: The Main Store phone number will be pre-filled.

These fields are populated based on the selected Main Store name, ensuring accuracy and eliminating the need for redundant data entry.





Step 23: the fifth field will be pre-populated with the product name that being traced on this form. This ensures consistency throughout the form and reduces the need for repetitive input by the representative.

Step 24: The seventh field will require the representative to enter the total quantity of the product available in the Main Store. This field ensures accurate inventory tracking at the Main Store level and provides essential data for stock management.

Step 25: The eighth field will require the representative to enter the total quantity of the product taken from the Main Store. This field is crucial for recording stock movement and ensuring accurate updates to the Main Store's inventory.

Step 26: The ninth field will automatically calculate and display the quantity of product remaining in the Main Store.

This value is determined by subtracting the total quantity taken (Field 8) from the total quantity found (Field 7).

Formula:

Remaining Quantity = Total Quantity Found (Field 7) - Total Quantity Taken (Field 8)

This automated calculation ensures precise inventory tracking and eliminates manual errors.

Step 27: The tenth field will require the representative to capture a photo of any supporting evidence from the Main Store. This could include images of the product, storage conditions, or any other relevant documentation to substantiate the report.

Step 28: The eleventh field will allow the representative to enter any comments or additional observations regarding the Main Store process.

This field provides space for notes that may offer further context or details about the stock management activities at the Main Store.

Step 29 (Back to the Shop-Store): The twelfth field will require the representative to enter the total quantity of the product delivered to the Shop-Store, excluding the quantity that will be delivered directly to the shop. This field ensures precise tracking of the product distribution between the Shop-Store and the shop.

Step 29: The thirteenth field will automatically calculate and pre-populate the total quantity of the product now available in the Shop-Store.

This value is determined by adding:

- Step 14: The total quantity of the product initially found in the Shop-Store.
- Step 29: The total quantity of the product delivered to the Shop-Store.



Formula:

Total Quantity in Shop-Store = Initial Quantity (Step 14) + Quantity Delivered (Step 29)

This ensures accurate inventory tracking at the Shop-Store level.

Step 30: The fourteenth field will require the representative to enter the total quantity of the product delivered to the shop. This field ensures accurate documentation of the product quantity specifically allocated to the shop.

Step 40: The fifteenth field will automatically calculate and pre-populate the total quantity of the product now available in the shop.

This value is determined by adding:

- The initial quantity of the product found in the shop (previously entered in the form).
- The quantity of the product delivered to the shop (Field 14).

Formula:

Total Quantity in Shop = Initial Quantity found in the Shop (Step 7) + Quantity Delivered (Field 14 – Step 30)

This automation ensures precise inventory tracking for the shop.

Step 41: The sixteenth field will provide space for the representative to enter a general overall comment regarding the entire process or any observations that may not have been covered in the previous fields. This field allows for additional context, feedback, or notes that can enhance the overall report's completeness.

Note: Save and Submit Buttons

- Save Button:
 - The save button allows the representative to save a draft of the form.
 - Saved drafts will appear in the "In Progress" section, where they can be re-opened and edited at any time before submission.
- Submit Button:
 - The submit button finalizes the form and generates a PDF report.
 - The generated report will be available in the "Previous Reports" section for future reference.

These buttons ensure flexibility in the workflow, allowing representatives to save their progress or complete the report as needed.



2. ADMINISTRATIVE SIDE (BACK OFFICE)

This section of the application is dedicated to managing all administrative tasks related to the Reps Track and Trace application. The administrative side ensures seamless oversight, configuration, and support for the application's operations, enabling effective management of representatives and their activities.

Point 1 (Initial Login Credentials):

The application will be provided with default administrator login credentials:

Username: adminPassword: admin2000

These credentials will allow the administrator to access the system for the first time and configure the application as needed.

Point 2 (Administrator Home Page):

Upon successful login, the administrator will be directed to the Home Page, which includes:

Header Section:

- Display of the logged-in administrator's name as "Login as" on one side.
- The application's logo or other design elements on the opposite side.

Body Section:

- A vertical navigation column on the left, containing all required menus.
- The right side of the page dynamically displays content based on the selected menu, while the left navigation column always remains visible for easy access.

Navigation Menus:

- The vertical column will include key menus such as:
 - Security
 - Reports
 - Management

This layout ensures an intuitive and efficient interface for managing administrative tasks.



Point 3 (Security): The Security menu will allow the administrator to perform the following tasks:

- Add, Edit, and Delete Representatives:
 - Manage representatives' credentials and access levels to ensure accurate and secure tracking.
- Add and Edit Administrator Credentials:
 - Enable multiple administrators to access the application using their own unique credentials.
- Master Admin Permissions:
 - Only the Master Admin (with the default admin and admin2000 credentials) will have the authority to delete other administrator accounts and manage high-level administrative controls.

This setup ensures secure and hierarchical management of access rights while providing flexibility for multiple administrators to use the application.

Point 4 (Reports): The Reports Page will provide four sections for detailed insights:

- Shops
- Shop Stores
- Main Stores
- Representatives

Features:

- Shops, Shop Stores, and Main Stores:
 - Task Bar: Allows selection of the specific shop, shop store, or main store for review.
 - Time Frame Selector: Enables filtering of data by a specified period.
 - Data Display: Shows the current product quantity based on the latest submitted report from representatives.
 - Quantity Trace: Provides a trace of inventory changes over time.
 - Performance Graph (Optional): Though the feature can visualize data as a graph, this is currently beyond the project budget.
- Representatives' Reports:
 - Task Bar: Allows selection of a specific representative to view their reports.
 - Time Frame Selector: Filters data to a specific period.
 - Data Display: Shows details such as:
 - Submitted reports.
 - Shops, Shop Stores, and Main Stores visited by the representative.

This page enables efficient tracking and analysis of inventory and representative performance while providing flexibility for tailored insights.



Point 5 - Tasks Assignment (Currently Out of Budget):

This section is intended to enable administrators to:

- Assign Tasks: Load specific tasks for individual representatives.
- Task Visibility: Representatives will receive the assigned tasks as messages within the application.
- Completion Status: Representatives can mark tasks as complete once finished.
- **Feedback Mechanism:** Task completion will reflect as feedback in the administrator's dashboard for tracking and follow-up.

This feature, while valuable for task management and streamlined communication, is currently out of budget for implementation.

Point 6 - Management Section:

The Management section provides the administrator with tools to effectively manage shops and main stores.

Features:

- Add Shops/Shop-Store and Main Stores:
 - Input new shops or main stores into the system with all relevant details (e.g., name, address, contact information).
- Edit Existing Entries:
 - Update details for existing shops or main stores to ensure accurate records.
- Delete Shops and Main Stores:
 - Remove outdated or no longer relevant entries from the system.

This section ensures the administrator can maintain an up-to-date and organized database of all shops and main stores.

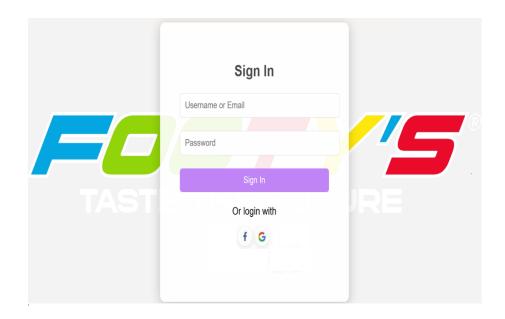


3. **ILLUSTRATION**

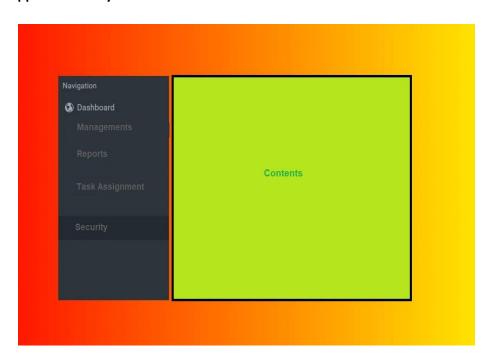
This description is purely illustrative and serves to outline the structure and functionality of the application. It does not reflect the final design, layout, or styling of the application, which may evolve during the development and implementation phases.

3.1. Admin Side

Login



Admin Application Body

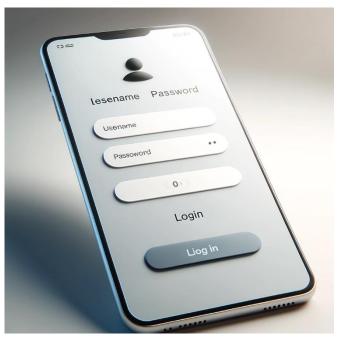






2024/287972/07 36 Republic Road Edenvale, Johannesburg, 1609 3.2. User Side (Rep Side)

Login on the phone

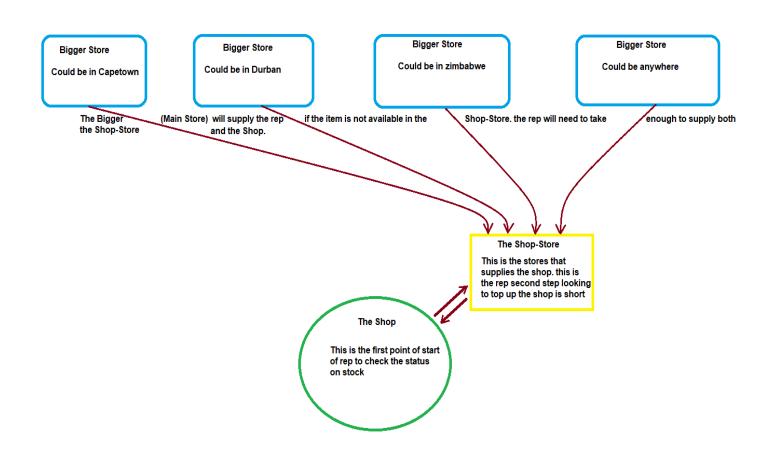


Application body





REPRESENTATIVES WORKFLOW CHART



---- The End -----