# Project

## Project Decisions

Moved all Automation epic tasks to not-selected status.

Sprint 13

**Date - 9/12/2023**

Decision made by:

EM

Decision: Removed 16.5 story points worth of stories from the sprint. Reason: overcommitment during planning.

CC: ,

Developer

Developer

Date - 9/14/2023

Decision made by:

PO

Decision: DevOps and deployment architecture implementation and Reports functionalities has to be a part of phase 1. CC:

COO

Sprint 14

**Date - 9/26/2023**

Decision made by:

EM

Decision:

→ Before starting a sprint, frontend developer, backend developer and tester should be assigned to each story.

→ Decided to clear out all the spilled over stories and setup sprint goals for that.

Date - 10/05/2023

Decision made by:

EM

Decision:

→ There should be a way to review the completed work against the sprint goals during the middle of the sprint. (Preferably send an email to the EM)

## Research & Development

### Power BI for reports

#### What is Power BI?

Power BI is a business intelligence (BI) and data visualization tool developed by Microsoft. It allows users to connect to a wide range of data sources, including on-premises and cloud-based databases, spreadsheets, and web services. Once the data is connected, users can create interactive reports and dashboards that can be shared with others.

Power BI is a self-service BI tool, meaning that it is designed for users of all skill levels, including those with no prior BI experience. It is easy to use and provides a wide range of features for creating and sharing data insights.

Some of the key features of Power BI include:

 **Data connectivity:** Power BI can connect to a wide range of data sources, including on-premises and cloud-based databases, spreadsheets, and web services.

 **Data visualization:** Power BI provides a wide range of data visualization options, including charts, graphs, maps, and tables.

 **Interactive reports and dashboards:** Power BI users can create interactive reports and dashboards that can be shared with others.

 **Natural language querying:** Power BI supports natural language querying, which allows users to ask questions about their data in plain language.

 **Collaboration:** Power BI makes it easy to collaborate with others on reports and dashboards.

#### How is it beneficial for our Product?

 **Improved collaboration:** Power BI makes it easy to share reports and dashboards with others, both inside and outside of the organization. This can help to improve collaboration between different teams and departments, and with partners and stakeholders.

 **Safety and security:** Power BI can be used to analyze safety and security data. This information can be used to identify and address potential safety and security risks.

 **Reduced costs:** Power BI can help to reduce the costs associated with data analytics and reporting. Power BI is a cloud-based service, so there is no need to invest in expensive hardware or software. Additionally, Power BI is relatively easy to use, so businesses do not need to invest in extensive training for their employees.

#### How to use Power BI with Azure

Power BI can be integrated with Azure in a number of ways. For example, you can use Azure data sources to connect to your data in Power BI. You can also use Azure services to host and deploy your Power BI reports and dashboards.

Here are some examples of how you can use Power BI with Azure:

 **Connect to Azure data sources:** Power BI can connect to a wide range of Azure data sources, including Azure SQL Database, Azure Synapse Analytics, and Azure Data Lake Storage. This allows you to bring your Azure data into Power BI for analysis and visualization.

 **Host and deploy Power BI reports and dashboards:** You can use Azure services, such as Azure App Service and Azure Blob Storage, to host and deploy your Power BI reports and dashboards. This allows you to share your reports and dashboards with others and make them available on the web and mobile devices.

 **Use Azure services to enhance your Power BI reports:** You can use Azure services, such as Azure Machine Learning and Azure Cognitive Services, to enhance your Power BI reports with artificial intelligence (AI) capabilities. For example, you can use Azure Machine Learning to create predictive models that can be used to forecast future trends in your data.

#### How to integrate Power BI in our own app

Power BI Embedded allows developers to embed Power BI reports, dashboards, and tiles into their own applications. This allows developers to provide their users with interactive data visualizations and insights without having to build their own BI solution.

To implement Power BI in a web app, developers need to:

1. Create a Power BI workspace and publish the reports and dashboards that they want to embed in their web app.
2. Register an Azure AD application and obtain the client ID and client secret.
3. Embed the Power BI reports and dashboards in their web app using the Power BI Embedded API.

For more detailed steps, Microsoft provides a number of resources to help developers implement Power BI in their web apps, including documentation, tutorials, and sample code.

#### Useful Articles and Tutorials on Power BI

**Articles:**

 [Microsoft Power BI on Azure](https://azure.microsoft.com/en-us/products/power-bi#%3A~%3Atext%3DSelf-service%20and%20modern%20enterprise%2Cfast-paced%2C%20competitive%20environment)

 [Power BI + Azure | Microsoft Power Platform](https://powerbi.microsoft.com/en-us/power-bi-and-azure/)  [Azure and Power BI - Microsoft Learn](https://learn.microsoft.com/en-us/power-bi/connect-data/service-azure-and-power-bi#%3A~%3Atext%3Dbusiness%20an%20edge.-%2CContext%20insights%20with%20Power%20BI%20Embedded%20analytics) **Videos:**

 [Power BI Integration with Azure | Power BI Tutorial 2023 | Power BI for Beginners | K21Academy](http://www.youtube.com/watch?v=WEShu1h5Nhk)  [Real-time Dashboard Using Azure Cloud & Power BI | Intellipaat](http://www.youtube.com/watch?v=wq2kCg__SPU)

 [PowerBI Azure Tutorial For Beginners | Power BI Integration with Azure | Edureka | Azure Live - 3](http://www.youtube.com/watch?v=JhHDE8gYVR4)  [How to start building Data & Analytics solutions using Power BI & Azure?](http://www.youtube.com/watch?v=VIVqBZrwXwk)

 [Azure DevOps Integration with Power BI | Azure DevOps Analytics to Power BI Dashboards](http://www.youtube.com/watch?v=BkAypi-KIFQ)

### Migrate to Azure Maps from Google Map API

**Comparison**

|  |  |  |
| --- | --- | --- |
|  | **Azure Maps** | **Google Maps** |
| **Extensive search functionality**  (Which requires for users to select their drop locations by search their nearest landmarks) |  |  |
| **Richness and depth of data of the map** |  |  |
| **Timeliness and reliability** |  |  |
| Multi-Language Support | Limited | Comprehensive |

**Conclusion**

#### Extensive Search Functionality:

 Users easily select drop locations by searching for landmarks or addresses.

 Real-time autocomplete suggestions and a vast database of points of interest enhance convenience.

#### Richness and Depth of Map Data:

 Google Maps offers detailed, up-to-date maps with continuous updates.

 Satellite imagery and Street View provide visual insights and navigation assistance.

#### Timeliness and Reliability:

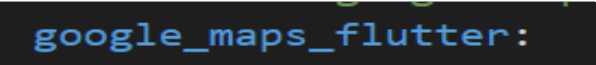
 Real-time data updates, including traffic information, ensure accurate navigation.

 Google Maps is known for its consistent and reliable map data, making it a trusted choice for users.

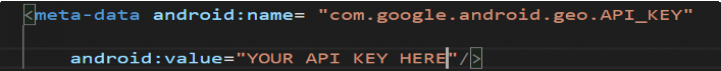
In summary, Google Maps excels in offering extensive search capabilities, rich map data, and timely, dependable information, making it the preferred choice for a wide range of navigation and location-based services.

### Google map localization on mobile

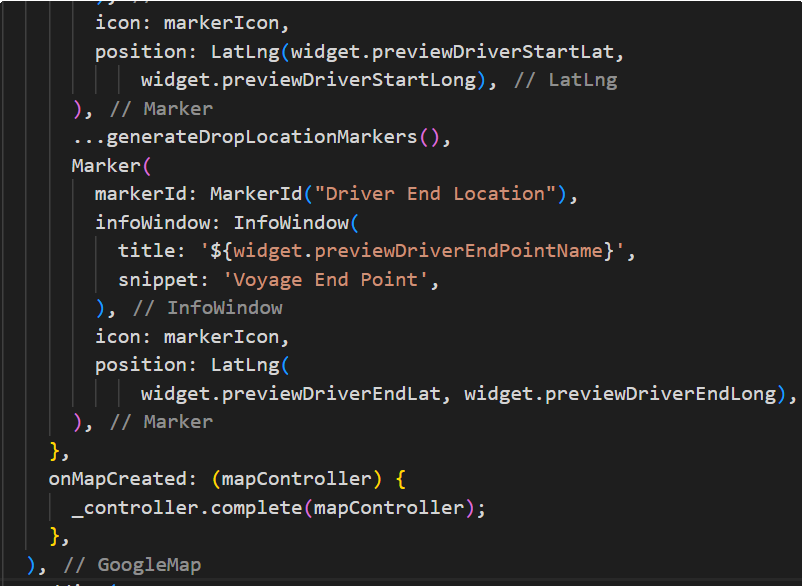
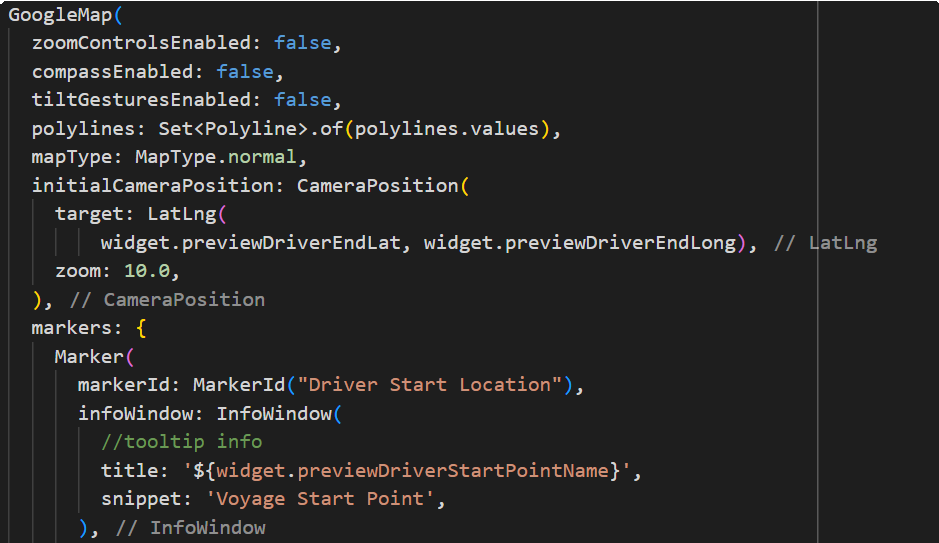
This document will attempt to capture the process of localizing google maps within the flutter framework for android devices. We first start off by adding the google maps plugin to our flutter project, or specifically the ***pubspec.yaml*** file:



Then, we add the Google Maps API key in the **AndroidManifest.xml** file:



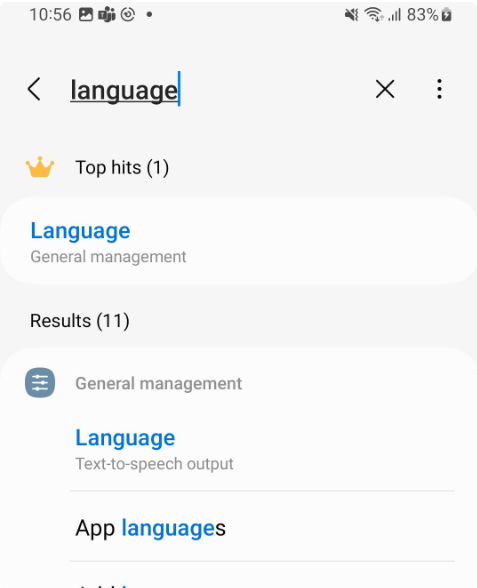
Following this, we shall display the map, by initializing the GoogleMap widget in flutter:



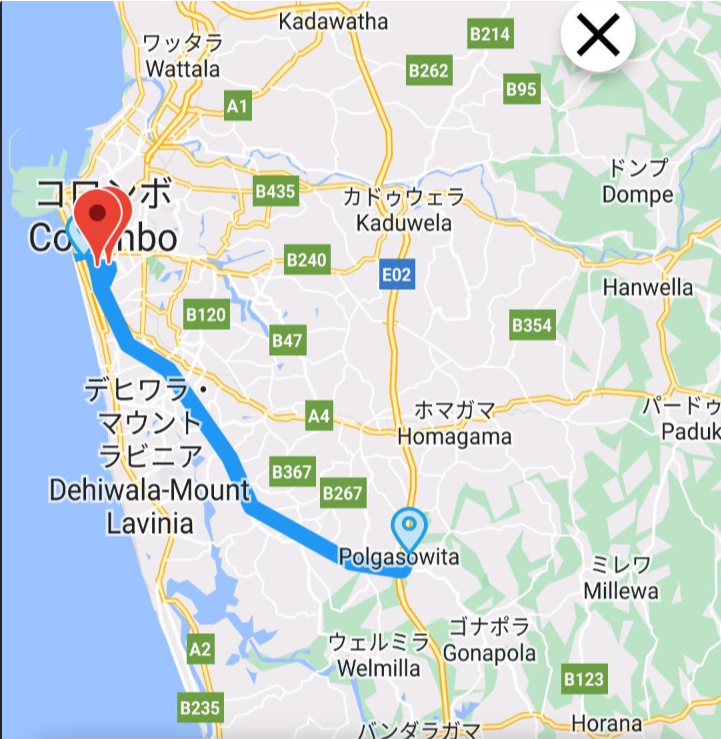
The result is the following view, when you hot reload the application:



Now, let’s assume that as the viewer, you cannot understand the language the map is in. Instead, you are more familiar with **Japanese**. To ensure that this is reflected on the map, you simply have to change the **device language** by accessing the device settings:



The map view will look like this:



Currently, however there is no property to change the locale, within the google maps flutter package. This plugin simply wraps itself around the Android SDK, so we cannot control the language settings apart from the standard system localization demonstrated above.

##### External Readings:

 [Adding Google Maps to Flutter. This article will show you step-by-step… | by Kenzie Davisson | Flutter | Medium](https://medium.com/flutter/google-maps-and-flutter-cfb330f9a245)

[[google\_maps\_flutter]: Localization in google maps · Issue #100118 · flutter/flutter (github.com)](https://github.com/flutter/flutter/issues/100118)

### SMS Service Comparison



This document compares three alternative SMS service providers to Azure Communication Services SMS. Azure Communication Services is a reliable service, but it has limited regional availability. This prevents us from creating an Azure (ACS SMS) resource within our Azure tenant.

Sending SMS alerts can be identified as one of the core components of our system. It allows us to send SMS alerts to users regarding various event that occur within our system such as,

 Trip Request Approve / Decline.

 Voyage Allocations / Deallocations etc.

This comparison is solely to compare and select a SMS service for development and QA testing, as there are plans of integrating our application with the client’s existing SMS gateway.

#### Introduction

For this comparison the following 3 services will be considered.

1. Twilio - ( )

[Communication APIs for SMS, Voice, Video & Authentication | Twilio](https://www.twilio.com/)

1. Infobip - ( )

[Build meaningful customer relationships across any communication channel](https://www.infobip.com/)

1. Notify.lk - ( [Notify - SMS Gateway, Campaign Manager and API Provider in Sri Lanka](https://www.notify.lk/) )

##### 1. Twilio

Twilio is a cloud communications platform that enables developers to build, scale, and operate real-time communication applications. It provides a suite of APIs that allow developers to add voice, video, messaging, and authentication capabilities to their applications.

Twilio is used by businesses of all sizes, from startups to Fortune 500 companies, to build a wide range of communication applications.

Twilio is a popular choice for developers because it is easy to use, scalable, and reliable. It also offers a wide range of features and integrations, making it a versatile platform for building a variety of communication applications.

Here are some real-world businesses who uses Twilio:

**Airbnb Netflix Uber Slack**

##### 3. Infobip

Infobip is a global cloud communications platform that enables businesses to reach their customers across multiple channels, including SMS, email, voice, video, and social media.

Infobip is used by businesses of all sizes, from startups to Fortune 500 companies, to improve their customer engagement and communication. It is a popular choice because it is easy to use, scalable, and reliable. It also offers a wide range of features and integrations, making it a versatile platform for businesses of all types.

Here are some real-world businesses who uses Infobip:

 **Nike**

 **Spotify**

 **Vodafone**

##### 3. Notify.lk

Notify.lk is a SMS gateway provider for Sri Lanka. It is a SMS gateway provider for Sri Lanka. It is developed and maintained by Ceylon Systems. Notify has the coverage to send SMS for any phone number of any network which has SMS receiving capability.

Here are some Sri Lankan businesses who use Notify:

 **Washapp**

 **Chenara Dodge ** **Alaris**

 **Ganna.lk**

#### Comparison

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Twilio** | **Infobip** | [**Notify.lk**](http://notify.lk/) |
| **Pricing Model** | Region based Consumption Based Billing (Pay as you Go) | Region based Consumption Based Billing (Pay as you Go) | Pay as you go + Packages Available |
| **Pricing Page** | [SMS Pricing in United](https://www.twilio.com/en-us/sms/pricing/us) [States for Text Messagi](https://www.twilio.com/en-us/sms/pricing/us) [ng | Twilio](https://www.twilio.com/en-us/sms/pricing/us) | [Pricing - SMS -](https://portal.infobip.com/payments/pricing/communication-channels/177) [portal.infobip.com](https://portal.infobip.com/payments/pricing/communication-channels/177) | [Pricing - Notify.lk](https://www.notify.lk/pricing/) |
| **Price per SMS (Sri Lanka)** | 0.2260 USD | 0.3085 USD | Package Dependent  **Pay as you go:**  One-time fee: Rs.7,500/- SMS Cost: Rs.0.60/-\* |
|  |  |  | **Lite Package:** |
|  |  |  | **Rs.690**/Month |
|  |  |  | FREE SMS: 480  SMS Cost: Rs.1.10/-\* Free SMS count is the calculated number of SMS that you can send for the monthly fee you are  paying. |

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  | Free SMS quota will be added as a balance in your account and this quota will be valid for 60 days from the offered date. |
| **Global SMS Availability?** | 180+ Countries supported. | Not clearly mentioned (Likely supports 150+ countries) | Only Supports Sri Lanka |
| **Restricted Countries if any** | no info | no info | Only Supports Sri Lanka |
| **Free Trial Available** | Yes (Credit System). | Yes. | Yes. |
|  | The Twilio free trial offers up to $15 worth of credits to be spent on their services. Since the cost is region dependent the amount of messages that can be sent may differ | The free trial offers up to 100 messages to be sent. | The Free Trial offers up to 10 messages to be sent. |
| **Free Trial Limitations** | [https://support.twilio.com](https://support.twilio.com/hc/en-us/articles/360036052753-Twilio-Free-Trial-Limitations)  [/hc/en-](https://support.twilio.com/hc/en-us/articles/360036052753-Twilio-Free-Trial-Limitations) [us/articles/36003605275](https://support.twilio.com/hc/en-us/articles/360036052753-Twilio-Free-Trial-Limitations) [3-Twilio-Free-Trial-](https://support.twilio.com/hc/en-us/articles/360036052753-Twilio-Free-Trial-Limitations) [Limitations](https://support.twilio.com/hc/en-us/articles/360036052753-Twilio-Free-Trial-Limitations) | Can only send up to 100 messages.  Can only send messages to verified numbers. | Can only send up to 10 messages. |
| **Max SMS Length** | Up to 160 characters, or | Up to 160 characters, or | Maximum character |
| **(chars)** | up to 70 if the message | up to 70 if the message | count for a single paged |
|  | contains one or more | contains one or more | SMS is 160 (70 for |
|  | Unicode characters. | Unicode characters. | Unicode content). You |
|  |  |  | can send up to 621 |
|  |  |  | characters in a SMS |
|  |  |  | (268 for Unicode |
|  |  |  | contents). |
| **Bulk SMS Support** | Yes | Yes. | Yes. |
|  | Bulk SMS support is available. However, the messages aren’t cc’d like emails. | Bulk SMS support is available. However, the messages aren’t cc’d like emails. | Bulk SMS support is available. However, the messages aren’t cc’d like emails. |
|  | A message to each recipient is treated as 1 message, so we are required to loop over the number of recipients. | Have to call the REST endpoint for per each recipient. | Have to call the REST endpoint for per each recipient. |
| **Analytics Dashboard** | Yes | Yes. | Yes. |

|  |  |  |  |
| --- | --- | --- | --- |
| **HTTP API (REST)** | Yes | Yes | Yes |
| **Developer Documentation (API)** | [API Reference - In-D](https://www.twilio.com/docs/api) [epth Reference for all T](https://www.twilio.com/docs/api) [wilio APIs and SDKs](https://www.twilio.com/docs/api) | [Infobip Documentatio](https://www.infobip.com/docs/api/channels/sms/sms-messaging/outbound-sms/send-sms-message) [n Hub](https://www.infobip.com/docs/api/channels/sms/sms-messaging/outbound-sms/send-sms-message) | [Notify.lk API Docume](https://developer.notify.lk/api-endpoints/) [ntation](https://developer.notify.lk/api-endpoints/) |
| **NPM Packages** | [npm: twilio](https://www.npmjs.com/package/twilio) | [npm: @infobip-api/sd](https://www.npmjs.com/package/%40infobip-api/sdk) [k](https://www.npmjs.com/package/%40infobip-api/sdk)  Note: The above package is a community developed package | not available for Node.js |
| **SMS Testing though Web portal** | **DONE** | **DONE** | **DONE** |
| **Service Dev R & D** | **DONE** | **DONE** | **DONE** |
| **Developer Comments** | Integration with the provided NPM package is straightforward and easy. | The NPM package works to a certain extent, but since it’s a community developed package, there are concerns  regarding LTS. | Tested the REST endpoint with Postman. |
|  |  | Tested the REST endpoint with Postman. |  |

My Comments

All the above three services provide a limited free trial account for us to test out their features. However, the trial versions may not be sufficient for development and thorough Dev and QA testing. Considering the use cases in our system the trial SMS / Credit limit will be expended mid testing.

If we are to consider testing the system end-to-end for different use-cases, I believe subscribing to an appropriate service is the best option, as it’s difficult to estimate the number of messages required for development and testing.

## Dependency management

### Issue Dependencies - Sprint 13

|  |  |
| --- | --- |
| Overall status | **URGENT** |
| Total Impacted story count/points. | ~~9 / 44.5~~ |
| Blocked story count / points | ~~1 / 18~~ |
| Current velocity in story points | 16.5 |
| Dependency clearance due date | Sep 22, 2023 **CLEARED** |
| Dependency Score | to-be-decided |

**Issues Impacted**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Key** | **Summary** | **Assignee** | **Reporter** | **Status** | **Frontend** **Dev.** | **Backend Dev.** | **Tester** | **Story Points** |

[9 issues](https://inivos.atlassian.net/issues/?jql=key%2Bin%2B%28%27TN-598%27%2C%2B%27TN-346%27%2C%2B%27TN-513%27%2C%2B%27TN-345%27%2C%2B%27TN-209%27%2C%2B%27TN-461%27%2C%27TN-207%27%2C%27TN-561%27%2C%27TN-591%27%29%2B%2B%2B%2B%2B&src=confmacro)

**Dependencies**

|  |  |
| --- | --- |
| **Dependancy** | **Status** |
| Sequence Diagram – Developer | **NON-CRITICAL** |
| API keys to be shared with Developer. - Developer - **DONE** Architecture diagram - Architect1  - **DONE** | **DONE** |
| User story / Acceptance Criteria / BA Diagram - BA - **DONE**  Blob storage for the QA environment. Setup QA environment - Developer - **DONE**  Architecture Diagram - Architect1 - **DONE**  Device for QA testing - SM - **DONE**  Sequence Diagram - Developer2 **DONE**  Deployment Diagram - Developer / Architect1 to confirm which deployment method to use. (candidate choices: GitHub actions, azure Devops) | **DONE** |
| QA environment resource provisioning - Developer - **DONE** | **DONE** |
| Architecture Diagram - Architect1 - **DONE**  Sequence Diagram - Developer | **NON-CRITICAL** |
| Database Diagram & Changes - Developer2 -  **DONE**  Sequence Diagram - Developer2 | **NON-CRITICAL** |
| Sequence Diagram - Developer | **NON-CRITICAL** |
| Sequence Diagram - Frontend Developer | **DONE** |
| Create required cloud resources in Dev environment. Pending due to naming convention issue. - Architect1 - **DONE**  Create required cloud resources in QA environment. Pending due to naming | **NON-CRITICAL** |

|  |  |  |
| --- | --- | --- |
|  | convention issue. - Architect1 - **DONE**  Sequence Diagram - Developer2 **DONE**  Deployment Diagram - Developer - **REMOVED**  Happy path test cases - QA2 |  |

### Issue Dependencies - Sprint 14

**Dependency summary**

|  |  |
| --- | --- |
| Overall status | **URGENT** |
| Total impacted estimated story count/points. | ~~5 / 17~~ |
| Total impacted not-estimated story count. | 3 |
| Blocked story count / points | 3 |
| Current velocity in story points | 26.4 |
| Dependency clearance due date | Oct 12, 2023 **CLEARED** |
| Dependency Score | to-be-decided |

**Backlog** **summary**

|  |  |
| --- | --- |
| Unplanned (Backlog) story count / points | 4 / 18 |
| Planned story count / points. | 15 / 56 |
| Tentative next sprint story count / points. | 10 / 24 |
| Not ready story count | 47 |

**Issues Impacted**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Key** | **Summary** | | | **Assignee** | | **Reporter** | | **Status** | | **Frontend Dev.** | | **Backend Dev.** | **Tester** | **Story Points** |
|  | |  |  | |  | |  | |  | |

**Dependencies**

|  |  |
| --- | --- |
| **Dependency** | **Status** |
| R&D on deriving time zone from the offset sent from client side - Developer2 **DONE**  Database diagram - Developer2 **PENDING** | **NON-CRITICAL** |
| Need to discuss with Architect1 how the code refactoring should be done. **DONE** | **DONE** |
| Sequence diagram - Developer **DONE** | **DONE** |
| User story needs to be updated. BA **PENDING**  Architect1 suggested to maintain a separate entity called Driver in the app. Need to make stories related to that entity and need to get approval from PO  - BA **DONE**  UI design - Error page should be designed to show if the login feature is crashed. - BA  **NEED REVIEW**  Cloud resource for Dev & QA - need to create separate user accounts for Drivers and their accounts should be password less accounts in Azure. - Developer **PENDING**  Skills - Need to do R&D on Microsoft Authenticator app integration. - Developer **PENDING**  Architecture diagram - Architect1 **PENDING**  Database diagram, sequence diagram, deployment diagram - | **BLOCKED** |

|  |  |  |
| --- | --- | --- |
|  | Developer |  |
| TN-592 | Acceptance criteria - BA **DONE**  Resource provisioning Dev & QA - Developer **PENDING**  R&D on how to create a secure URL to upload files - Developer  **PENDING**  R&D on how to clear the files stored in the server side. Developer  **PENDING**  Database diagram, sequence diagram - Developer **DONE** | **CRITICAL** |

### Issue Dependencies - Sprint 15

**Dependency summary**

|  |  |
| --- | --- |
| Overall status | **NOT-CRITICAL** |
| Total impacted estimated story count/points. | 6 / 32 |
| Total impacted not-estimated story count. | 1 |
| Blocked story count / points | 0 |
| Current velocity in story points | 26.4 |
| Dependency clearance due date | Oct 20, 2023 |
| Dependency Score | to-be-decided |

**Backlog** **summary**

|  |  |
| --- | --- |
| Unplanned (Backlog) story count / points | 26 / 107 |
| Current sprint story count / points. | 14 / 42 |
| Tentative next sprint story count / points. | 8 / 30 |
| Not ready story count. | 99 |
| Bugs count. | 45 |

**Issues Impacted**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Key** | **Summary** | **Assignee** | **Reporter** | **Status** | **Frontend Dev.** | **Backend Dev.** | **Tester** | **Story Points** |

1. [issues](https://inivos.atlassian.net/issues/?jql=key%2Bin%2B%28%27TN-718%27%2C%2B%27TN-630%27%2C%2B%27TN-766%27%2C%2B%27TN-727%27%2C%2B%27TN-592%27%2C%27TN-728%27%2C%2B%27TN-627%27%2C%2B%27TN-602%27%2C%2B%27TN-433%27%29%2B%2B%2B%2B%2B%2B%2B%2B%2B%2B%2B%2B&src=confmacro)

**Dependencies**

|  |  |
| --- | --- |
| **Dependency** | **Status** |
| User story - BA **DONE** Acceptance criteria - BA **DONE**  UI - BA **DONE**  Add vehicle page, Edit vehicle page, View vehicles page. | **DONE** |
| **DELETED** | **DELETED** |
| **DELETED** | **DELETED** |
| Acceptance criteria - BA **DONE**  UI - BA **DONE**  Sequence diagram - Frontend Developer  **PENDING** | **NOT-CRITICAL** |
| Cloud resource for Dev & QA / Subscription - SMS service in azure is not provisioned for the organization subscription. need to check with PO , IT and Architect1 - Developer **DONE**  Skills - R&D on writing function app in NestJs - Developer2 **PENDING**  Database diagram - Developer2 **DONE** | **NOT-CRITICAL** |

|  |  |  |
| --- | --- | --- |
| [**DONE**](https://inivos.atlassian.net/browse/TN-627) | - | **DONE** |
| [i](https://inivos.atlassian.net/browse/TN-602)  [**DEVELOPMENT IN PROGRESS**](https://inivos.atlassian.net/browse/TN-602) | Acceptance criteria needs to be updated. BA **DONE**  UI design - BA **DONE**  Error page should be designed to show if the login feature is crashed.  Not access page should be designed to show if the user has the access to login or not.  Skills - Developer  **PENDING**  R&D on Microsoft Authenticator app integration.  R&D on flutter package for login with Microsoft.  Sequence diagram - Developer **DONE** | **NOT-CRITICAL** |
|  | R&D on how to create a secure URL to upload files - Developer  **DONE**  R&D on how to clear the files stored in the server side. Developer  **PENDING** | **NOT-CRITICAL** |
|  | Acceptance criteria - color change in role name tags BA  **DONE**  UI - BA **DONE** | **DONE** |

### Issue Dependencies - Sprint 16

**Dependency summary**

|  |  |
| --- | --- |
| Overall status |  |
| Total impacted estimated story count/points. | 7 / 50 |
| Total impacted not-estimated story count. | 3 |
| Blocked story count / points | 1 |
| Current velocity in story points | 20.2 |
| Dependency clearance due date | Nov 9, 2023 |
| Dependency Score | to-be-decided |

**Backlog** **summary**

|  |  |
| --- | --- |
| Unplanned (Backlog) story count / points | 16 / 73 |
| Current sprint story count / points. | 11 / 43 |
| Tentative next sprint story count / points. | 10 / 40 |
| BA IN-PROGRESS story count. | 15 |
| Bugs count. | 16 |
| ToGroom story count | 23 |

**Issues Impacted**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Key** | **Summary** | | | | **Assignee** | | **Reporter** | | **Status** | | **Frontend Dev.** | **Backend Dev.** | **Tester** | **Story Points** |
|  | |  |  |  | |  | |  | |

**Dependencies**

|  |  |
| --- | --- |
| **Dependency** | **Status** |
|  | **DONE** |
| Cloud resource provisioning for Power BI integration in Dev & QA environment - Developer  **PENDING**  Architecture diagram - Developer **PENDING**  Sequence diagram - Developer **PENDING**  Happy path test cases - Done | **NOT-CRITICAL** |
| Technical debt declaration - need to get the confirmation on whether the voyage delete feature needs a soft delete. **DONE**  **Do the soft delete.**  Happy path test cases - Done | **NOT-CRITICAL** |
| Technical debt declaration - need to get the confirmation on whether to do the deployments using GitHub actions or Azure pipelines or both - **DONE**  **Use GitHub actions.** | **TO BE REVIEWD** |
| Skills - skills on bicep templates - Developer **PENDING**  Architecture diagram - **DONE**  Deployment diagram - **DONE** | **NOT-CRITICAL** |
| Acceptance criteria - BA **PENDING**  UI - BA **PENDING**  Technical debt clarification - **DONE**  Check whether generating a csv file for the given fields from AD is feasible. | **BLOCKED** |

|  |  |  |
| --- | --- | --- |
|  | Decide how to save departments and cost centers for the all employees as the employee - department relation is based on department IDs.  **Use department ID and cost center ID to validate those columns. DB should be updated chunk by chunk. There should be a UI to show failed updates and the failed reason. Departments and Cost centers should be updated prior to the employee bulk update.**  Sequence diagram - **blocks with the acceptance criteria. PENDING**  Happy path test cases - QA  **blocks with the acceptance criteria. PENDING** |  |
| [**DEV - TODO**](https://inivos.atlassian.net/browse/TN-685) | UI - remove save button - BA  **PENDING**  Sequence diagram - **PENDING**  Happy path test cases - Done | **NOT-CRITICAL** |
| [es.](https://inivos.atlassian.net/browse/TN-632) [**TOGROOM**](https://inivos.atlassian.net/browse/TN-632) | Technical debt clarification - blocks with audit logs - need to update the createdBy column in the voyage table for the requirement. - **DONE**  **Audit logs and audit columns are separate things, implement audit columns for the feature.** | **TO BE REVIEWD** |
|  | Technical debt clarification - blocks with audit logs - need to update the approver column in the trip request table for the requirement. - **DONE**  **Audit logs and audit columns are separate things, implement audit columns for the feature.** | **DONE** |
| [**DONE**](https://inivos.atlassian.net/browse/TN-630) |  | **DONE**  Note: **Since there is no subscription bought for SMS service, the SMS’s will be tested via emails.** |

### Issue Dependencies - Sprint 17

**Dependency summary**

|  |  |
| --- | --- |
| Overall status | **NOT-CRITICAL** |
| Total impacted estimated story count/points. | 24 / 6 |
| Total impacted not-estimated story count. | 3 |
| Blocked story count / points | 2 |
| Current velocity in story points | 26.4 |
| Dependency clearance due date | Nov 23, 2023 |
| Dependency Score | to-be-decided |

**Backlog** **summary**

|  |  |
| --- | --- |
| Unplanned (Backlog) story count / points | 24 / 97 |
| Current sprint story count / points. | 10 / 40 |
| Tentative next sprint story count / points. | 9 / 48 |
| BA IN-PROGRESS story count. | 11 |
| Bugs count. | 9 |
| ToGroom story count | 22 |

**Issues Impacted**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Key** | **Summary** | **Assignee** | **Reporter** | **Status** | **Frontend Dev.** | **Backend Dev.** | **Tester** | **Story Points** |

Dependencies

|  |  |
| --- | --- |
| **Dependency** | **Status** |
| Happy path test cases - Done | **NOT-CRITICAL** |
| Acceptance criteria - **DONE**  Vehicle should have a status which indicate the availability of the vehicle.  This status should change when voyage is created and completed.  Vehicle get all endpoint should have a filter to get the vehicles by the status.  Happy path test cases - Done | **NOT-CRITICAL** |
| Acceptance criteria - **DONE**  Generic user role information popup need not to show all the users. Role description and permissions are enough for the generic user role.  Scroll bar should apply for the permissions section as well.  Figma design - **DONE**  Happy path test cases - Done | **NOT-CRITICAL** |
| Needs approval for cloud resource provisioning for staging environment from PO - BA - **PENDING** | **BLOCKED** |
| Acceptance criteria - **DONE**  Abandoned voyage section should be removed from the scope as that is not implemented in this release. | **BLOCKED** |

|  |  |
| --- | --- |
| Depends on the passenger drop time . As the mentioned dropped time field is not updated when the passenger is dropped; a separate story is required for that task. - **DONE**  Jira issue for the new task ( |  |
| Happy path test cases - Done | **NOT-CRITICAL** |
| Happy path test cases - Done | **NOT-CRITICAL** |
| Acceptance criteria - **DONE**  There should be number validation for the odometer reading and the continue button should be disabled.  UI - **DONE**  Invalid number input design. Happy path test cases - Done | **NOT-CRITICAL** |
| Acceptance criteria - **DONE**  Refresh icon for the update map will not focus once the list rearranged. Propose to add a button popping up in the screen when re-arranged the passenger list.  dropped passengers' map points should not count for the map re-routing.  UI - **DONE**  Update button design.  Happy path test cases - Done | **CRITICAL** |

## Sprint Plans

Sprint goals:

 Clear 75% of WIP -

Developer

 Clear 50% of Mobile stories (based on story points) - /

Developer

QA

QA

 Fix all Bootstrap styling issues. -

Dev

 Complete email notifications system. -

Developer2

 mplement Routeguard for Manager user. -

Developer

 Complete 75% of Login & Authorization epic.

/

/

/

, /

Developer

Sprint summary:

|  |  |
| --- | --- |
| total spillover stories points / count | 42.5 sp / 10 - Developer , Developer2 |
| total new stories points/count | 13 sp /2 - Developer , Frontend Developer |
| current velocity | 17.5 sp |
| commitment | 55.5 sp (commitment is 13 + spillovers) |
| dependency status | 1 architecture input dependency. Architect1  Pending test case reviews. There are 121 test cases pending review and no reviewer assigned yet for web test cases. ( @Dilini Dassanayake )  Mobile device purchase (PO forwarded to IT) - PO  More information → [Sample Issue Dependency S](https://inivos.atlassian.net/l/cp/znW0UUnw) [ummary Document (From Transpomate)](https://inivos.atlassian.net/l/cp/znW0UUnw) |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Key** | **Summary** | **Assignee** | **Reporter** | **Frontend Dev.** | **Backend Dev.** | **Tester** | **Story Points** | **Status T Due Labels** |

### Sprint 15

#### Sprint goals:

 Complete spilled over mobile + web stories (SC - 4 / SP - 19)- , ,

Developer

Developer

 Achieve 43 SPs - (19 SP (10) spillovers + 24SP (4) new items).

Completed 33 SPs

13 SPs out of 19 SPs spilled over completed→ 68% from target 17 SPs out of 24 SPs new stories completed → 70% from target 3 SP sprint scope change - 6.9% from the commitment

 Complete R&D task on Power BI and provide a concise documentation about the research on confluence -  Complete R&D task on Azure Maps and provide a summary of the findings -

Developer

#### Sprint summary:

|  |  |
| --- | --- |
| total spillover stories points / count | 19 SP / 4 - Developer, Developer |
| total new stories points/count | 24 SP / 10 - Developer , Frontend Developer , Developer2, Developer |
| current velocity | 26.4 SP |
| commitment | 43 SP (commitment is 24 + spillovers) |
| dependency status | More information → [Issue Dependencies - Sprint 14](https://inivos.atlassian.net/wiki/spaces/T/pages/103022593) |
| burndown |  |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Key** | **Summary** | **Assignee** | **Reporter** | **Frontend Dev.** | **Backend Dev.** | **Tester** | **Story Points** | **Status T Due Labels** |

### Sprint 16

#### Sprint goals:

 Complete spilled over mobile + web stories (SC - 4 / SP - 13)- Developer ,

 Achieve 49 SPs - (13 SP (4) spillovers + 36 SP (8) new items)

**Completed 38 SPs → 78% of total SPs.**

**13 SPs out of 13 SPs spilled over completed→ 100% from target. 25 SPs out of 36 SPs new stories completed → 70% from target.**

Developer2

 Complete R&D task on SMS service comparison and provide a summary of the findings - points - 3)

(Story

#### Sprint summary:

|  |  |
| --- | --- |
| total spillover stories points / count | 13 SP / 4 - Developer , , Frontend Developer |
| total new stories points/count | 36 SP / 8 - Developer , Developer2 , Developer3 , Developer |
| current velocity | 20.2 SP |
| commitment | 49 SP (commitment is 36 + spillovers) |
| dependency status | TN-602  Acceptance criteria needs to be updated. BA **DONE**  UI design - BA **DONE**  Error page should be designed to show if the login feature is crashed.  Not access page should be designed to show if the user has the access to login or not.  Sequence diagram - Developer  **DONE**  TN-592  R&D on how to create a secure URL to upload files - Developer **DONE**  R&D on how to clear the files stored in the server side. Developer **PENDING**  More information → [Issue Dependencies - Sprint 15](https://inivos.atlassian.net/wiki/spaces/T/pages/109051905) |

**Spill overs:**

**Key Summary T Created Updated Due Assignee Reporter P Status Resolution**

[No issues found](https://inivos.atlassian.net/issues/?jql=Project%2B%3D%2B%22Transpomate%2BNew%22%2Band%2Btype%2Bin%2B%28Bug%2C%2BStory%2C%2BTask%29%2Band%2Bstatus%2Bnot%2Bin%2B%28Done%29%2Band%2Bsprint%2B%3D%2B152%2B%2B%2B%2B%2B%2B%2B%2B&src=confmacro)

#### New tasks:

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Key** | **Summary** | **Assignee** | **Reporter** | **Frontend Dev.** | **Backend Dev.** | **Tester** | **Story Points** | **Status T Due Lab** |

QA



**DONE**



**DONE**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| [23 issues](https://inivos.atlassian.net/issues/?jql=Project%2B%3D%2B%22Transpomate%2BNew%22%2Band%2Btype%2Bin%2B%28%27bug%27%2C%2B%27story%27%2C%2B%27task%27%29%2Band%2Bsprint%2B%3D%2B154%2Band%2Bsprint%2Bnot%2Bin%2B%28152%29%2B&src=confmacro) |  |  |  |  |  |  |  |  |

### Sprint 17

#### Sprint goals:

 Complete spilled over mobile + web stories (SC - 2 / SP - 11)- Developer ,  Achieve 46 SPs - (11 SP (2) spillover + 35 SP (7) new items) -

Developer2

Developer Developer

Supun Basnayake

**Completed 4 SPs → 9% of total SPs.**

3 SPs out of 11 SPs spilled over completed→ 27% from target. 1 SPs out of 35 SPs new stories completed → 3% from target.

 Identify all the defects in E2E testing stories (SC - 2 / SP - 10).

#### Sprint summary:

|  |  |
| --- | --- |
| total spillover stories points / count | 11 SP / 2 - Developer |
| total new stories points/count | 35 SP / 7 - Developer , Developer2 , Developer |
| current velocity | 20.2 SP |
| commitment | 52 SP (commitment is 36 + spillovers) |
| dependency status | TN-724  Skills on bicep templates - Developer **DONE**  More information → [Issue Dependencies - Sprint 16](https://inivos.atlassian.net/wiki/spaces/T/pages/115179521/Issue%2BDependencies%2B-%2BSprint%2B16?atlOrigin=eyJpIjoiOTY0ZDIxMjg5MTg5NGNmZWEwYTAwNmM2ZmFkNzlhMjgiLCJwIjoiYyJ9) |

**Spill overs:**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Key** | **Summary** | **T** | **Created** | **Updated** | **Due** | **Assignee** | **Reporter** | **P** | **Status** | **Re** |
|  |  |  |  |  |  |  |  |  |  |  |

#### New tasks:

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Key** | **Summary** | **Assignee** | **Reporter** | **Frontend** | **Backend** | **Tester** | **Story** | **Status** | **T** | **Due** | **Lab** |
|  |  |  |  | **Dev.** | **Dev.** |  | **Points** |  |  |  |  |

### Sprint 18

#### Sprint goals:

 Complete spilled over mobile + web stories (SC - 7 / SP - 44)- , ,

Developer

Developer2

Developer

 Achieve 76 SPs - (44 SP (7) spillover + 32 SP (6) new items) -

,

Supun Basnayake

#### Sprint summary:

|  |  |
| --- | --- |
| total spillover stories points / count | 44 SP / 7 - Developer , Developer2 , Developer |
| total new stories points/count | 32 SP / 6 - Developer , Developer2 , Developer , SM |
| current velocity | 27.2 SP |
| commitment | 76 SP (commitment is 32 + spillovers) |
| dependency status | TN-686  More information → [Issue Dependencies - Sprint 17](https://inivos.atlassian.net/l/cp/WEC8dr1z) |

**Spill overs:**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Key** | **Summary** | **Assignee** | **Reporter** | **Frontend Dev.** | **Backend Dev.** | **Tester** | **Story Points** | **Status** | **T** | **Due Lab** |

[4 issues](https://inivos.atlassian.net/issues/?jql=Project%2B%3D%2B%22Transpomate%2BNew%22%2Band%2Btype%2Bin%2B%28Bug%2C%2BStory%2C%2BTask%29%2Band%2Bstatus%2Bnot%2Bin%2B%28Done%29%2Band%2Bsprint%2B%3D%2B156%2Band%2Bsprint%2B%3D%2B157%2B&src=confmacro)

#### New tasks:

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Key** | **Summary** | **Assignee** | **Reporter** | **Frontend Dev.** | **Backend Dev.** | **Tester** | **Story Points** | **Status** | **T** | **Due** | **Lab** |

## Meeting notes & Action items

All backlog grooming notes and documents come here.

## Sprint reviews

Change the distance to units KMs.



**(New story - CR linked to**

[ned), So that I can see and manage all voyages effectively.](https://inivos.atlassian.net/browse/TN-119)

[**DONE**](https://inivos.atlassian.net/browse/TN-119) **119)** / Manage Voyages page **[**

**]**

[age and coordinate scheduled voyages effectively](https://inivos.atlassian.net/browse/TN-612) [**DONE**](https://inivos.atlassian.net/browse/TN-612)

Add starting odometer reading instead of ending odometer reading. below UI changes to be done in voyage information

 address --> drop location  name --> full name

 date --> remove pipe or keep a space

 vehicle --> introduce a format to vehicle ids Fix UI alignment issues.

**Mobile app**



**New story - CR** / Mobile Landing page / **[**

[and view the pending voyages](https://inivos.atlassian.net/browse/TN-613) [**DONE**](https://inivos.atlassian.net/browse/TN-613) **]**

Change the logo to the newly designed Transpomate logo. (contact Ajenth from marketing) Button names & UI should match Figma.

**Pending Voyage - CR / [**

[**DONE**](https://inivos.atlassian.net/browse/TN-619) **]**

add below items as Acceptance Criteria to

**)**

Need to add a loader if there is a delay when loading the voyage on the screen. In the pending voyages page, change the name to "pending voyage."

**Setup a UI review session and explore** (Responsible: BA )

Identify gaps between Figma and the App make changes to the plan to close them. (eg:- Passenger list - alignment issue for the call icon

- @Surani Withanage )

**New story - CR / Voyage preview page / [**

**]**

In the preview page, we should show the *exact location.*

Remove voyage ID.

Need to add the re-arrangement in the voyage preview page as well.

should show the start and end locations in the route preview but there should not be drops (red pins) in those points.

[So that I can view the route and be prepared](https://inivos.atlassian.net/browse/TN-614) [**DEV - TODO**](https://inivos.atlassian.net/browse/TN-614)

[bout the scheduled voyages for the day](https://inivos.atlassian.net/browse/TN-54) [**DONE**](https://inivos.atlassian.net/browse/TN-54)

firmation (after starting voyage) change the

Merge these 2 functions → Take picture and select picture.



**New story - CR / Odometer capture / [**

**]**

[t to the Transport Coordinator](https://inivos.atlassian.net/browse/TN-616) [**DEV - TODO**](https://inivos.atlassian.net/browse/TN-616)

 What should happen is when you take a picture, it should be shown as a preview instead of selecting.

(follow-up with PO if we should remove the existing feature - )

BA

|  |
| --- |
| **New story - CR / Odometer ending / [** |
| [sport Coordinator for him to compare with the image](https://inivos.atlassian.net/browse/TN-617) [**TOGROOM**](https://inivos.atlassian.net/browse/TN-617) | | **]** |

 In the odometer ending page, remove the restriction of 5 decimals and need to add decimal values as well.



New story - CR / Change the status columns of the tables to an icon / [

**]**



[e view pages, So that I can quickly know the status](https://inivos.atlassian.net/browse/TN-618) [**DONE**](https://inivos.atlassian.net/browse/TN-618)

In the view pages, we need to show an icon/ toggle switch rather than having a label saying Enable or Disable , to show the status of the records so that it's easier for the users (admin / manager / TC) to see the status.

### Sprint Review (06/10/2023) meeting notes & action items

#### Web Notes

1.



Assign Role pop-up:

[e role isn't included)](https://inivos.atlassian.net/browse/TN-598) [**DONE**](https://inivos.atlassian.net/browse/TN-598)

Need to add all the users in the pop-up and make it scrollable.

There should be another button in line with the assign button called apply or save.

These pop-ups should be the same as other pop-ups in the system (need to make them consistent)

1.



Allocate Voyages:

[view the route of the voyage.](https://inivos.atlassian.net/browse/TN-560) [**DONE**](https://inivos.atlassian.net/browse/TN-560)

 The date and time should be close together. The order should be Date, Time, Vehicle, Start point, and End point.

 In the voyage allocation/view map pop-up, we must change the origin and destination to the start point and end point. Same as the names given in the fields.

 In all location pop-ups (Except for the pop-up when requesting a trip), "suggested address" should be renamed to just "address".  There are some UI misalignments. Make it look professional/consistent.

1. Manage Voyages and Manage Trip Requests :

The color of the tabs should be one color (color as in the stroke color). The selected tab should be shown as highlighted.

The tabs/ buttons don't look clickable; therefore, we need to change the UI. Need to do a UI revamp and change it to a tab kind of page. Search and date fields are not aligned. Need to align them.



1. Email received by TC: [started](https://inivos.atlassian.net/browse/TN-591) [**DONE**](https://inivos.atlassian.net/browse/TN-591)

The date shown is wrong. The solution given by PO is to keep UTC and the AD should be able to pick the time zone of the recipient and display that time on the email. (This should be done later- possibly phase 2)

For now, we can show the time the driver started the voyage.

Everywhere you update a date (request date or voyage date), there must be a time zone stored of the user who did that action.

When deploying, we need to change the "DoNotReply" part to "[DoNotReplyTMSexample.com](mailto:DoNotReplyTMS@example.com)". There is a task for arm templates - within this task, we need to do this.

Same thing for our product. Change “[http://Client.com](http://ansell.com/) " with Project1.

Asked to check this offline.

**Mobile Notes**

1. Passenger List:

Make the checkbox a bit small in the mobile app

Need to change the list to a table format

1. Voyage preview:

[standing of the voyage details.](https://inivos.atlassian.net/browse/TN-514) [**DONE**](https://inivos.atlassian.net/browse/TN-514)

Need to make the outer box a bit compact and it should be translucent (could reduce the opacity)

[n see the pins on the map for the present passengers](https://inivos.atlassian.net/browse/TN-461) [**DONE**](https://inivos.atlassian.net/browse/TN-461)

Check with Rishi if there is a scrollbar already implemented. If so, then no need.



a. Need to have the sign-out button under a dropdown. This dropdown should be placed on the header.

User Profile Page (**Jira Link -**

[l information](https://inivos.atlassian.net/browse/TN-622) [**TOGROOM**](https://inivos.atlassian.net/browse/TN-622))

1. Required Fields:
   1. Email
   2. First and Last Name
   3. Mobile Number
   4. Role/s assigned.
   5. Status
2. All these fields should be non-editable.

View User page (**Jira Link -**

[**DONE**](https://inivos.atlassian.net/browse/TN-427))

|  |
| --- |
| The sign-out button is a bit too big (**Jira Link -** |
| [me, and a user profile icon in the header, So that I can access my user profile options with convenience.](https://inivos.atlassian.net/browse/TN-813) [**TOGROOM**](https://inivos.atlassian.net/browse/TN-813) | |

1. 1. The roles should be shown comma-separated.
2. If a user does not have an employee account, the user should see an “Access Denied” page and the user should contact the admin (Admin should add that employee, and then the employee should log in). A “Create employee account” form is not needed.
3. When assigning users in “Roles” page from assign users popup, keep one search option selected. Preferably “First Name” option. (**Jira**

|  |
| --- |
| **Link -** |
| [ely search for and assign users based on the default selected option](https://inivos.atlassian.net/browse/TN-822) [**DELETED**](https://inivos.atlassian.net/browse/TN-822) | | ) |

1. There should be a separate UI to show access denied page like the other status code pages (404 / 500). (**Jira Link -** )



[s a user, I need to view a "Access Denied" page with a user-friendly interface, So that I know that my access is denied.](https://inivos.atlassian.net/browse/TN-823) [**DEV - TODO**](https://inivos.atlassian.net/browse/TN-823)

* 1. Need a button to redirect to login page.

1. Voyage information page - Future enhancement
   1. Distance metric unit should be configurable as part of the internationalization (mi / km)
   2. Drop location should be fetched from the selected location for the trip request. Currently it’s showing employee address.

)

* 1. The selected location should be visible after closing the map modal. (UI is made. Jira ticket is pending).

1. All Manager Mails - Future Enhancements
   1. Need to add a link in every mail to auto approve or reject (a button) (**Jira Link** - To be added)
   2. Need to add a link to navigate to the approve/decline page. (This is for the mail that the manager receives when the employee makes a new trip request) (**Jira Link** - To be added)
2. All emails - (**Jira Link** - To be added)
   1. The time zone should either be added or removed from all the emails.



Add Trip Request page - (**Jira Link** -

[at I can identify the location that I have chosen on the location field.](https://inivos.atlassian.net/browse/TN-821) [**DONE**](https://inivos.atlassian.net/browse/TN-821))

* 1. Location field should be mandatory (The star is missing from the field)

#### Mobile Notes

1. Driver Login - (**Jira Link** - To be added)
   1. Turn off multifactor authentication. The driver should only log in using the authenticator app.
2. Prepare a document for Ansell for Azure setup. (**Jira Link** - To be added)

## Sprint Retrospectives

### Sprint Retrospective - Sprint 14 (Day 10)

A sprint retrospective is a type of meeting within the Agile framework, when teams reflect on what went well and what could be improved for their next sprint. Retrospectives are essential to continuously improve your sprint process and ensure key learnings are incorporated for next time.

#### Things that went well

EM

The team was more delivery focused. This has led to completing 58 story points within the sprint.

Acknowledging documents.

Developer

Workflow between Devs and Qas was good.

Developer

Appreciating Thambara's work on function apps. Especially given the task was completely new technology for the entire team.

QA

 Developers delivered things on time.

#### Things that didn’t go well

EM

Not considering the Devops pipelines within the sprint. The unexpected pipeline work has led to spilling over of one task.

Developer2

Time spent on learning and doing stuff that we weren’t doing before such as dependency clearance, updating due dates and a lot of calls.

### Sprint Retrospective - Sprint 15 (Day 10)

A sprint retrospective is a type of meeting within the Agile framework, when teams reflect on what went well and what could be improved for their next sprint. Retrospectives are essential to continuously improve your sprint process and ensure key learnings are incorporated for next time.

#### Things that went well

EM

Spilled-over story points counts have been reduced.

BA

Completed most of the bugs.

QA

None of the stories were put to on-hold state.

#### Things that didn’t go well

Developer2

Some stories were delayed during code review state. Need a way to track R&D efforts during the sprint.

### Sprint Retrospective - Sprint 16 (Day 10)

A sprint retrospective is a type of meeting within the Agile framework, when teams reflect on what went well and what could be improved for their next sprint. Retrospectives are essential to continuously improve your sprint process and ensure key learnings are incorporated for next time.

#### Things that didn’t go well

Dev Lead

Code review time delays

EM

There should be place where best practices for code reviewing and developments has documented. There should be a way to track front-end and back-end development in progress.

## Development environment

Frontend Web Backend **Mobile**

Framework:

 Flutter (Version: 3.10.6) Language:

 Dart (Version: 3.0.6) IDEs used:

 Visual Studio Code (Version: 1.84.0)

 Android Studio (Version: Flamingo 2022.2.1) Purpose:

 Visual Studio Code - Lightweight and enables fast application build.

 Android Studio - Can carry out extensive debugging and enables **APK** build for QA release. Set Up:

[How To Set Up: A Guide](https://standing-gardenia-cde.notion.site/Setup-331d8840f837432da34c8c0feb912bd0)