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Community Insights PowerApps Design Document

Community Insights

Reference Documents

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# Introduction

This Design Document is to describe the function/features that are required for an Early Demonstrable Product [EDP] that does not necessarily follow best practice in terms of design/approach.

The primary goal is to produce an App/Solution as quickly as possible to allow demonstration of feature/function at a simple high level to enable engagement with prospective customers.

During Design & Build the driving decision factor is speed of delivery/function over a best practice, well-architected solution.

Where possible, future development from EDP onwards into a full product should re-use/expand on that work done in the EDP, but the EDP should not be delayed or hindered by designing with that in mind.

There is no requirement/necessity for any ‘integrations’ to be built – with only data being the external to PowerApp requirement.

Any data that is needed to be stored does not need to be in a fully formed data model. It should be managed in the simplest form – i.e. Sharepoint List/spreadsheet is acceptable, if the use-case fits.

This Solution is expected to be delivered in a single phase of 2-3 sprints, and therefore the scope of feature / function required needs to be reviewed to ensure this can be achieved.

EDP Fast fit 4–6 week piece of work that will showcase the App features and functions, without necessarily having **real** connections and processes working.

i.e. Demands may just be a single pre-loaded dataset and nothing ‘actually’ working in terms of fetching / loading / editing / saving the data.

## Assumptions

* Integrations are not expected to be functional.
* Data Model is not expected to be well-architected
* NFRs are generally not relevant to the EDP
  + Exception being that it must perform sensibly – and not have noticeable delays.
* Some buttons/functions/features that are intentionally not operational will have a message/pop-up indicating that they are not available in the EDP, and some info about what it *would* do once implemented.

## Requirements

The Business requirements as written, are included here for reference when reading the design. Some elements from the requirements have been altered/updated in the design to reflect a better solution.

### Insights Demand Creation App

#### Login

|  |  |  |  |
| --- | --- | --- | --- |
| Reference | Given (Scenario) | When | Then |
| EDP-01-01 | The user has access to their desktop device / laptop (with a keyboard and mouse) and can see the Community Insights Dashboard icon | The user double clicks on the Community Insights Dashboard App | The user is presented with the Splash Screen.  The Splash Screen displays Splash Screen Text and presents the user with the following options...  - Continue - Exit |
| EDP-01-02 | The user has been presented with the Splash Screen | The user selects the Continue option | The user accesses the Demand Dashboard Screen (EDP-02) |
| EDP-01-03 | The user has been presented with the Splash Screen | The user selects the Exit option | The application closes |

#### Demand Dashboard

|  |  |  |  |
| --- | --- | --- | --- |
| Reference | Given (Scenario) | When | Then |
| EDP-02-01 | The user has accessed the Demand Dashboard Screen | The Demand Dashboard Screen is presented | The Community Insights Dashboard Screen presents...  - an option to Create a New Demand - a list of the Demands that the Current User owns - an option to Search for a Demand - an option to Exit the application |
| EDP-02-02 | The user has been presented with the Demand Dashboard Screen | The user selects the Create New Demand option | The user accesses the Create Demand Screen (EDP-03) |
| EDP-02-03 | The user has been presented with the Demand Dashboard Screen | The user has selects a Demand from the list of the Demands that the Current User owns | The user accesses the View Demand Screen (EDP-09) |
| EDP-02-04 | The user has been presented with the Demand Dashboard Screen | The user selects the "Search for a Demand" option | The user will be presented with the following dialogue...  "This feature is not yet available. It will be possible to search for Demands using critieria like the Demand Reference, the owner of the Demand, the person involved, whether the Demand is currently enabled and the location or area that a Demand Related to." |
| EDP-02-05 | The user has been presented with the Demand Dashboard Screen | The user selects the "Exit" option | The application closes |

#### Create Demand

|  |  |  |  |
| --- | --- | --- | --- |
| Reference | Given (Scenario) | When | Then |
| EDP-03-01 | The user has accessed the Create Demand Screen | The Create Demand Screen is presented | The user is presented with a the Create Demand Screen  - The following fields are presented...  - Reference (NULL, Non Editable)  - Title (Mandatory)  - Description (Mandatory)  - The Creating User (Non-editable, defaulted to the Current User)  - Type (Mandatory)  - Ownership Type (Staff Member or Unit selection, Mandatory)  - Enabled - (Mandatory, defaulted to Enabled)  - Select Active Days and Times (defaulted to all day on every day of the week, Mandatory)  - Select Person Selection (Option)  - Location Type (Fixed Location / Geographical Area, Mandatory)  - Required Activities (At least one entry is mandatory, Required Activity Text and Possible Results for each)  - Repeat Intervals (Mandatory)  - The following options are presented...  - Cancel  - Save Demand |
| EDP-03-02 | The user has been presented with the Create Demand Screen | The user selects "Staff Member" within the Ownership Type field | The user is prompted to select a Staff Member (EDP-04) |
| EDP-03-03 | The user has been presented with the Create Demand Screen | The user selects "Team" within the Ownership Type field | The user is presented with the following dialogue...  "This feature is not yet available. It will be possible to select the Team that owns this Demand. Any users that are a member of the Team will then be able to see this Demand when using the Community Insights mobile app." |
| EDP-03-04 | The user has been presented with the Create Demand Screen | The user selects "Select Active Times of Day and Days of Week" | The user is prompted to select Times of Day and Days of Week (EDP-05) |
| EDP-03-05 | The user has been presented with the Create Demand Screen | The user selects "Select Related Person" | The user is presented with the following Related Person options...  - Enter Related Person Manually - Select Related Person From RMS |
| EDP-03-06 | The user is presented with the Related Person options | The user selects "Enter Related Person Manually" | The user is presented with the following dialogue...  "This feature is not yet available. It will be possible to record the details of the person, to which this demand relates, manually. This will include their...  - Surname and Forenames - Date of Birth - Address - Image - Risk / Threat Indicators" |
| EDP-03-07 | The user is presented with the Related Person options | The user selects "Select Related Person From RMS" | The user is prompted to select Person from RMS (EDP-06) |
| EDP-03-08 | The user has been presented with the Create Demand Screen | The user selects "Fixed Location" within the Location Type field | The user is prompted to select a Fixed Location (EDP-07) |
| EDP-03-09 | The user has been presented with the Create Demand Screen | The user selects "Geographical Area" within the Location Type field | The user is prompted to select a geographical area (EDP-08) |
| EDP-03-10 | The user has been presented with the Create Demand Screen | The user selects the Cancel option | The user is returned to the Dashboard screen (EDP-02) |
| EDP-03-11 | The user has been presented with the Create Demand Screen | The user selects the Save option and all mandatory elements have been completed | The Demand is saved and the user is returned to the Dashboard screen (EDP-02) |
| EDP-03-12 | The user has been presented with the Create Demand Screen | The user selects the Save option and some mandatory elements have not been completed | The user is presented with the following dialogue...  "Please complete all mandatory fields before saving."  The user is then returned to the Create Demand Screen |

#### Select Staff Member

|  |  |  |  |
| --- | --- | --- | --- |
| Reference | Given (Scenario) | When | Then |
| EDP-04-01 | User has been prompted to enter a Staff Member | The user enters text and clicks on Search | The text entered will be used to search the Collar Number and Surname fields and A list of matching staff members will be presented |
| EDP-04-02 | The user has been presented with a list of matching staff members | The user selects a result | The selected staff member will be assigned as the owner to the Demand |

#### Active Days & Times

|  |  |  |  |
| --- | --- | --- | --- |
| Reference | Given (Scenario) | When | Then |
| EDP-05-01 | The user has been prompted to select Times of Day and Days of Week | The selects a day of the week | Then are given the option to enter...  - From the start of the day until a specified time - From a specified time until the end of the day - Between two specified times - All day - Not on this day |

#### Select Person from RMS

|  |  |  |  |
| --- | --- | --- | --- |
| Reference | Given (Scenario) | When | Then |
| EDP-06-01 | The user has been prompted to select Person from RMS | The user enters criteria and clicks on search and the user has entered sufficient criteria | The user is presented with a list of person matches |
| EDP-06-02 | The user has been prompted to select Person from RMS | The user selects the Exit option | The user is returned to the Create Demand Screen |
| EDP-06-03 | The user has been prompted to select Person from RMS | The user enters criteria and clicks on search and the user has not entered sufficient criteria | The user is presented with the following dialogue...  In order to search for a person on the RMS you must enter...  - Surname, Forename, DOB or - RMS ID |
| EDP-06-04 | The user has been prompted to select Person from RMS | The user selects a record | The selected person will be assigned as the Related Person for the Demand |

#### Select Fixed Location

|  |  |  |  |
| --- | --- | --- | --- |
| Reference | Given (Scenario) | When | Then |
| EDP-07-01 | The user has been prompted to select a Fixed Location | The user partial details for a location | The user is presented with a list of location matches |
| EDP-07-02 | The user has been prompted to select a Fixed Location | The user selects a location from the list of matches | The user will be prompted to provide a radius. The user will be forced to enter a value. |
| EDP-07-03 | The user has entered a location and radius | The user saves | The location and radius selected will be assigned as the Fixed Location for the Demand |

#### Select Geographic Area

|  |  |  |  |
| --- | --- | --- | --- |
| Reference | Given (Scenario) | When | Then |
| EDP-08-01 | The user has been prompted to select a Fixed Location | The map loads | The map will be displayed along with...  - the geographical area already selected (if applicable) - an option to "Select an Area" - an option to exit - an option to clear - an option to save |
| EDP-08-02 | The map has been presented to the user | The user selects exit | The user is returned to the Create Demand Screen |
| EDP-08-03 | The map has been presented to the user | The user selects clear | The area defined will be cleared from the map, if defined |
| EDP-08-04 | The map has been presented to the user and an area has been defined | The user selects save | The area defined will be saved for the Demand and The user is returned to the Create Demand Screen |
| EDP-08-05 | The map has been presented to the user and an area has not been defined | The user selects save | The user will be presented with the following dialogue...  "Please specify an area on the map." |
| EDP-08-06 | The map has been presented to the user | The user selects "Select an Area" | The user is able to draw a polygon on the map The polygon is then visible on the map |

#### View Demand

|  |  |  |  |
| --- | --- | --- | --- |
| Reference | Given (Scenario) | When | Then |
| EDP-09-01 | The user has selected a demand that they wish to view from a list of Demands on the Demand Dashboard (from EDP-02-03) | The details of the demand are displayed | A list of the Responses to the demand are also displayed along with the details of the Demand  An Exit option is displayed |
| EDP-09-02 | The user has been presented with the details of the Demand and a list of the Responses to the Demand | The user selects the Exit option | The user is returned to the Demand Dashboard (EDP-02) |
| EDP-09-03 | The user has been presented with the details of the Demand and a list of the Responses to the Demand | The user selects a response | The user is presented with a detailed view of the response  An Exit option is displayed |
| EDP-09-04 | The user has been presented with a detailed view of the response | The user selects the Exit option | The user is returned to the Demand Details View |

### Community Insights App

#### Login

|  |  |  |  |
| --- | --- | --- | --- |
| Reference | Given (Scenario) | When | Then |
| EDP-10-01 | The user has access to their mobile phone with an icon for the Community Insights App | The touches that Comminity Insights App icone |  |
| EDP-10-02 | The user has been presented with the Splash Screen | The user selects the Continue option |  |
| EDP-10-03 | The user has been presented with the Splash Screen | The user selects the Exit option |  |

#### View Map

|  |  |  |  |
| --- | --- | --- | --- |
| Reference | Given (Scenario) | When | Then |
| EDP-11-01 | The user has accessed the View Map Screen | The map loads | The following are plotted on the map...  - Current location of the device [Fixed for EDP] - Any fixed location demands - Any geographical area demands that are enabled - Any Tasks - Any Investigations - Any Intelligence reports - Any CAD Incidents  The following options will be presented... - List View - Exit |
| EDP-11-02 | The user has been presented with the View Map Screen | The user selects the Exit option | The application closes |
| EDP-11-03 | The user has been presented with the View Map Screen | The user selects the List View option | The user accesses the List View Screen (EDP-12) |
| EDP-11-04 | The user has been presented with the View Map Screen | The user touches a Task on the map | A summary of the Investigation will be displayed |
| EDP-11-05 | The user has been presented with the View Map Screen | The user touches an Investigation on the map | A summary of the Investigation will be displayed |
| EDP-11-06 | The user has been presented with the View Map Screen | The user touches an Intelligence Report on the map | A summary of the Intelligence Report will be displayed |
| EDP-11-07 | The user has been presented with the View Map Screen | The user touches a CAD Incident on the map | A summary of the CAD Incident will be displayed |
| EDP-11-08 | The user has been presented with the View Map Screen | The user touches a Fixed Location Demand on the map | The View Demand Screen will be accessed (EDP-13) |
| EDP-11-09 | The user has been presented with the View Map Screen | The user touches on an area of the map that has a Geographical Area Demand displayed | The View Demand Screen will be accessed (EDP-13) |

#### View List

|  |  |  |  |
| --- | --- | --- | --- |
| Reference | Given (Scenario) | When | Then |
| EDP-12-01 | The user has accessed the List View Screen | The screen presented | A list of records is presented  - Any fixed location demands - Any geographical area demands that are enabled - Any Tasks - Any Investigations - Any Intelligence reports - Any CAD Incidents  The following options will be presented... - Map View - Exit |
| EDP-12-02 | The user has been presented with the List View Screen | The user selects the Exit option | The application closes |
| EDP-12-03 | The user has been presented with the List View Screen | The user selects the Map View option | The user accesses the Map View (EDP-11) |
| EDP-12-04 | The user has been presented with a list of Demands | The user selects a Demand | The user accesses the View Demand Screen (EDP-13) |

#### View Demand

|  |  |  |  |
| --- | --- | --- | --- |
| Reference | Given (Scenario) | When | Then |
| EDP-13-01 | The user has accessed the View Demand Screen | The Screen is displayed | A summary of the Demand will be displayed and an option for More Details |
| EDP-13-02 | The user has been presented with the summary of a Demand | The user selects More Details | A detailed view of a Demand will be displayed and an option to Respond will be presented |
| EDP-13-03 | The detailed view of a Demand has been presented | The user selects the Respond option | The Demand Response Screen is accessed (EDP-14) |

#### Record Demand Response

|  |  |  |  |
| --- | --- | --- | --- |
| Reference | Given (Scenario) | When | Then |
| EDP-14-01 | The user has accessed the Record Demand Reponse Screen | The Record Demand Response Screen is presented | The following attributes of the Demand are presented...  - Demand Type - Demand Reference - Demand Title - Owning Staff Member - Active Days and Times of Day - Related Person  - Surname  - Forenames  - Date of Birth  - Image of Person  - Address of Person - Premises Name / Number, Street, Town / City - Related Location - Premises Name / Number, Street, Town / City - Required Activities  The user is able to... - Record a date and time of the Response (Mandatory, defaulted to current date / time) - Record the details of any other staff members (Optional) - select a Response and record free text results for each of the Required Activities (Mandatory to record a Response for at least one of the Required Activities)  The following options are displayed...  - Save Response - Exit |
| EDP-14-02 | The Record Demand Response Screen has been presented | The user selects the Exit option | The user is returned to the View Map / View List |
| EDP-14-03 | The Record Demand Response Screen has been presented | The user selects the Save Response option and some mandatory information has not been recorded | The following dialogue is displayed...  "Please complete all mandatory information before saving this response." |

# Solution Design

## High Level Overview

#### EDP – No detail due to lack of function

## Solution High Level Design

### Security Considerations

For the purposes of the EDP access and control permissions are not necessary in the Application or Solution.

### Solution Components

PowerApp, plus a datasource.

### Data Assumptions

Data storage / structure should be however is needed to allow the application to function for the EDP.

This does not necessarily need to reflect a future model for the full solution, and primary consideration should be given to speed of setup/use rather than principled design.

### Data Overview

Data will be summarised & a sample set provided for the EDP.

Contents will be detailed further down the document.

### Insights Demand Creation

This is envisaged as a PowerApp primarily for a Tablet/larger device in Landscape format – but could be used on a Desktop.

#### Config Details

Nothing is expected to be ‘configurable’ for the EDP.

#### App Details

The App will contain at least 4x screens:

* Splash Screen Page
* Dashboard
* Demand View
* Demand Create

##### Splash Screen

This is to be common/shared across all usage requirements in Insights Apps

It could contain a ‘Declaration’ / ‘Disclaimer’ and Terms of Use that can be enabled so the user can Agree to or Decline.

**For the EDP this will be a static text phrase, with ‘Continue’ and ‘Exit’ buttons.**

If they select ‘Exit’, the App will close.

If they select ‘Continue’ the App will move to the Dashboard screen.

##### Dashboard

The user will come here after the Splash Screen and be presented with a list of Demands, and buttons to ‘Search’ for a demand, ‘Create’ a demand or ‘Exit’ the App.

*(See Requirement EDP-02-01)*

Exit behaves as on the Splash Screen, selecting ‘Search’ won’t perform any function, selecting ‘Create’ will take the user to the Demand Create feature, and selecting a demand on the list will take the user to the Demand View feature.

*(See Requirements EDP-02-02 : EDP-02-05)*

##### Demand View

This screen will be a view form of the agreed details contained in the Demand.

*(See Requirement EDP-09-01)*

The user will be able to return to the Dashboard or view details of a response if available.

*(See Requirements EDP-09-02 : EDP-09-03)*

##### Demand Create

This screen is expected to be a blank edit view/form for a Demand.

Some values will be collected from the user, some will be automatically populated, and some may be auto populated based on other entries.

E.G. Demand ID, Date Created, State = Enabled

Some fields will require pop-up/pop-out/separate screens to go and find/determine the data to be added. *(See Requirements EDP-03-02 : EDP-03-09, EDP-06, EDP-07, EDP-08)*

E.G.; Related Person

This requires the ability to search for someone by entering search details. They can choose to enter details manually, or search from the RMS.

If searching the RMS, then the user will need to enter either an RMS ID, or Name/DOB to find them, and then select them – and we’d only need to store the RMS ID for this

If entering manually, we’ll need to capture all relevant details – Name/DOB/Address etc.

*For the EDP, the manual entry is not required to function.*

***Layout TBC***

It will include buttons to ‘Save Demand’ and ‘Cancel’, both of which will return to the ‘Dashboard’, once actioned.  
If the ‘Save Demand’ action fails – data validation etc, then it will remain on the Demand Create screen.

*(See Requirements EDP-03-10 : EDP-03-12)*

Additional screens may be required to support the data collection – for example, selecting a location, this can be the case as needed/sensible.

### Community Insights

This is envisaged as a PowerApp primarily for a Mobile device in Portrait format

#### Config Details

Nothing is expected to be ‘configurable’ for the EDP.

#### App Details

The App will contain at least 5x screens:

* Splash Screen
* Record List (Map View)
* Record List (List View)
  + – Map/List may be same screen with 2x overlays, or separate – no requirement either way – but performant solution required.
* Record View
* Demand Edit/Update

##### Splash Screen

This is to be common/shared across all usage requirements in Insights Apps

Behaviour exactly as defined previously.

*(See Requirement EDP-10-01 : EDP-10-03)*

##### Record Map/List

This is the main landing page (post Splash Screen), which will default to the Map view.  
  
It will show a map centred on the ‘current’ location of the device, with an icon/pin indicating the device.

All Demands should be loaded as there will only be a small amount of data loaded.

User can zoom in/out and pan.

When zooming/panning the screen should show the icons / plots relevant to the map view.

*(See Requirements EDP-11-01)*

Selecting a pin will offer a summary of the item selected

*(See Requirements EDP-11-04 : EDP-11-07, EDP-13-01)*

Selecting within the Summary (if a Demand) will take the user to the ‘Record View’ screen.  
*(See Requirements EDP-11-08 : EDP-11-09, EDP-12-03)*

***Layout TBC***

If the List view is selected, then all relevant records will be listed with the appropriate data list for that record.

It will include buttons to:

‘switch view’ – this will allow the user to change between map and list view (may or may not be different screens) *(See Requirements EDP-11-03, EDP-12-03)*

An ‘exit’ button. *(See Requirements EDP-11-02 : EDP-12-02)*

##### Record View

This screen will be a view of the agreed details contained in the Demand.

*(See Requirements EDP-13-02)*

***Layout TBC***

It will include buttons to:

Respond to a Demand *(See Requirements EDP-13-02)*

Close and return to map/list

##### Demand Response

This screen will be an edit view/form of the currently selected Record (a Demand).

*(See Requirements EDP-14-01)*

The user should be able to add a response to activities, but not change a previous response.

i.e. add a start/end date or response.  
 But, if start date already present – NOT change it.

***Layout TBC***

It will include buttons to:

‘save’ *(See Requirements EDP-14-03 : EDP-14-04)*

‘cancel’ - return to the ‘Record Detail’ screen *(See Requirements EDP-14-02)*

## Solution Detail Design

### Security Considerations

For the purposes of the EDP access and control permissions are not necessary in the Application or Solution.

### Data Dictionary

DateTimes should all be stored in UTC timestamps.

All Data objects can be stored in the simplest component to minimise time/cost of integrated developments. For EDP this can include spreadsheets & SharePoint lists.

Below is not a model to follow, but used to inform what kind of data that field is to support design and use of the App.

**Demand**

|  |  |  |  |
| --- | --- | --- | --- |
| **Field / Property** | **DataType** | **Restrictions** | **Notes** |
| Demand ID | Numeric |  | Sequential Number from Config/DB seed. |
| Reference | String | Prefix (from Config) + sequential number (for year) + year  E.G., 01/12345/23 | Sequence in config – reset each year Prefix = ForceID |
| Created By | String |  |  |
| Type | String | "Wanted Offender", "ASB - Hotspot Patrol", "Section 60 Authority", "Problem Solving", "Victim Welfare", "DVPO" | From List |
| OwnershipType | String | "Staff Member", "Team" | From List |
| Owner | String |  |  |
| State | Boolean | Enabled/Disabled |  |
| Title | String | Max chars 50 |  |
| Description | String | Max chars 400 |  |
| LocationType | String | "Fixed Location", "Geographical Area" | From List |
| Location | Location |  | Easting & Northing |
| LocationRadius | Numeric |  | Specified in Metres |
| GeoFence | Object |  | Polygon info |
| RepeatIntervalUnit | String | “Hours”,”Days” | From List |
| RepeatInterval | Numeric |  |  |

**DaysActive**

|  |  |  |  |
| --- | --- | --- | --- |
| **Field / Property** | **DataType** | **Restrictions** | **Notes** |
| DaysActiveID | Numeric |  |  |
| Demand ID | Numeric |  | Link to Demand |
| Sun\_Active | Boolean |  | Active or not. |
| Sun\_TimeRanges | Object |  | Start & End Time. I.e. 06:00-18:00 or 20:00-00:00 |
| Mon\_Active | Boolean |  |  |
| Mon\_TimeRanges | Object |  |  |
| Tue\_Active | Boolean |  |  |
| Tue\_TimeRanges | Object |  |  |
| Wed\_Active | Boolean |  |  |
| Wed\_TimeRanges | Object |  |  |
| Thu\_Active | Boolean |  |  |
| Thu\_TimeRanges | Object |  |  |
| Fri\_Active | Boolean |  |  |
| Fri\_TimeRanges | Object |  |  |
| Sat\_Active | Boolean |  |  |
| Sat\_TimeRanges | Object |  |  |

**Related Person**

|  |  |  |  |
| --- | --- | --- | --- |
| **Field / Property** | **DataType** | **Restrictions** | **Notes** |
| RelatedPersonID | Numeric |  |  |
| Demand ID | Numeric |  | Link to Demand |
| RMS ID | String |  |  |
| Surname | String |  |  |
| Forename | String |  |  |
| Date Of Birth | Date |  |  |
| Image | Binary |  |  |
| Address-Number\_Name | String |  |  |
| Address-Street | String |  |  |
| Address-Town\_City | String |  |  |

**Demand Required Activity Responses**

|  |  |  |  |
| --- | --- | --- | --- |
| **Field / Property** | **DataType** | **Restrictions** | **Notes** |
| DemandActivityResponseID | Numeric |  |  |
| ActivityResponseID | Numeric |  |  |
| ResponseDateTime | DateTime |  |  |
| Response Text | String | 1000 |  |
| ResponderStaffID |  |  |  |
| OtherResponserStaffID |  |  |  |

Supplementary Datasets

**Demand Types**

|  |  |  |  |
| --- | --- | --- | --- |
| **Field / Property** | **DataType** | **Restrictions** | **Notes** |
| DemandTypeID | Numeric |  |  |
| Demand Type Name | String |  |  |
| Demand Type Description | String |  |  |

**Activities**

List to be provided.

|  |  |  |  |
| --- | --- | --- | --- |
| **Field / Property** | **DataType** | **Restrictions** | **Notes** |
| ActivityID | Numeric |  |  |
| DemandTypeID | Numeric |  | List? |
| Activity Name | String |  |  |
| Activity Description | String |  |  |

**Activity Actions**

List to be provided.

|  |  |  |  |
| --- | --- | --- | --- |
| **Field / Property** | **DataType** | **Restrictions** | **Notes** |
| ActivityActionID | Numeric |  |  |
| ActivityID | Numeric |  |  |
| Action Name | String |  |  |
| Action Description | String |  |  |

**Staff Members**

|  |  |  |  |
| --- | --- | --- | --- |
| **Field / Property** | **DataType** | **Restrictions** | **Notes** |
| StaffID | Numeric |  |  |
| FirstName | String |  |  |
| Surname | String |  |  |
| StaffNumber | String |  |  |
| Rank | String |  |  |
| ForceID | String |  |  |

**Config Data**

Any ‘config’ can be hard-coded for the EDP.

### Data Schema

### Screen Content/Process/Data Flows

#### Insights Demand Creation

##### Splash Screen

This is to be common/shared across all usage requirements in Insights Apps as indicated in the HLD.

It should show:

* App/Company Logo
* App Name/Family Name – “Insights – Demands”
* Information / Description as to purpose of the Application
* ‘client’ logo
* Declaration of use/terms of agreement
  + This should be ‘rich text’ to support Bold/Italic etc font controls.
* Continue / Exit buttons

##### Dashboard

This screen should allow the user to view and search for existing demands or create a new one.  
As the screen loads it should show list of all Demands that have been created.

*(See Requirement EDP-02-01)*

Each Demand will be listed in a Summary format in a gallery type view, with the following data fields:

|  |  |
| --- | --- |
| **Field / Property** | **Notes** |
| Demand ID |  |
| Demand Type |  |
| Demand Title |  |
| Owning User |  |
| Related Person - Surname |  |
| Related Person – Forename |  |
| Related Person – D.O.B. |  |
| Related Location | [Premises Number, Street Name, Town] |

The user should be able to scroll up and down to see all the demands.

Any given Demand can be selected and will navigate to the **Demand View** screen.

*(See Requirement EDP-02-03)*

There should be a button/option to allow the user to search for a demand.

* This button is not to be functional and should display a message:  
  "This feature is not yet available. It will be possible to search for Demands using critieria like the Demand Reference, the owner of the Demand, the person involved, whether the Demand is currently enabled and the location or area that a Demand Related to."

*(See Requirement EDP-02-04)*

Further Buttons to:

* ‘Exit’ the application *(See Requirement EDP-02-05)*
* ‘Create’ Demand *(See Requirement EDP-02-02)*

##### Demand View

This should show all the information of a Demand as in the summary shown on the Dashboard, and in addition a list of any related Responses.

For each response the following detail should be shown:

* Date Response created.
* Time Response created.
* Staff Member (that created the response)
  + Rank, Collar, Surname (Presented as concatenated string of the 3 objects, with a forward slash separator)

e.g. Rank: PC, Collar: 12345, Surname: Smith = PC/12345/SMITH

*(See Requirement EDP-09-01)*

The responses should be selectable, and when one is selected the following detail should be shown:

***All data from summary on demand screen***

Plus;

Other Staff Members present (Rank, Collar, Surname) – *formatted as above*

Activities responded to

If there is a response, then this info should be included too:

Response action taken for the activity

Response text

*(See Requirement EDP-09-03)*

Where there are ‘multiple’ sub-records (e.g. Activities, Responses) there should be a button/option to expand a pop-up/pop-out - rather than showing all immediately.

There should be a button to:

* Return to the Dashboard screen *(See Requirement EDP-09-02)*
* Close the response *(See Requirement EDP-09-04)*

##### Demand Create

The view should be the like that of the View, but with the required fields editable and empty. Some fields will be populated in the background, and do not need to be presented on the screen.

Background populated data:

|  |  |  |
| --- | --- | --- |
| **Field / Property** | **Value Used** | **Notes** |
| Demand ID | Next ‘record id’ |  |
| Created By | Current User ID |  |
| Location | Easting/Northing from selected location | If Fixed Location |
| LocationRadius | Value in metres | If Fixed Location |
| LocationArea | Polygon info of selected area | If Area Location |

On screen fields:

|  |  |  |  |
| --- | --- | --- | --- |
| **Field / Property** | **Field Req.** | **Value Used** | **Notes** |
| Reference |  | Auto created using ‘rule’ – Prefix[ForceID]/next sequence number/last 2 digits of year |  |
| Title | Mandatory |  |  |
| Description | Mandatory |  |  |
| Created By | Mandatory | Current User (auto-filled) | Not editable |
| Type | Mandatory |  | Select from List |
| OwnershipType | Mandatory |  | Select from List |
| State | Mandatory | Default to “Enabled” |  |
| Active Days/Times | Mandatory |  | For each day of the week (Sun-Sat)  - From the start of the day until a specified time  - From a specified time until the end of the day  - Between two specified times  - All day  - Not on this day |
| Related Person | Optional |  | Search for Person & store |
| Location Type | Mandatory |  | Select from List, location or are recorded from popup |
| Required Activities | Mandatory |  |  |
| Repeat Interval Unit | Mandatory |  | Unit of time & Number of the Units.  Unit = Hour or Day |
| Repeat Interval | Mandatory | Default to 0 |  |

*Reference* - will be shown as empty, and auto-populated on save.

*Title* - user should enter a single line of free text.

*Description* - user should enter test, multi-line and up to 1000 characters.

*Created By* - will be auto-populated as the current user StaffID

*Type* - this is the Demand Type, that will be selected from a [defined list.](#_Data_Dictionary)

*OwnershipType* - this is selected from a [defined list.](#_Data_Dictionary)

If Ownership Type ‘Staff Member’ is selected the user will be asked to find and select the Staff Member *(See Requirement EDP-03-02, EDP-04)*

If they select ‘Team’, then they will be presented with the prompt:

"This feature is not yet available. It will be possible to select the Team that owns this Demand. Any users that are a member of the Team will then be able to see this Demand when using the Community Insights mobile app.”

*(See Requirement EDP-03-03)*

*State* - this is defaulted to “Enabled”

*ActiveDays/Times* - the user can select which of the 7 calendar days are ‘active’ (Sun-Sat), by default they are all set to on or true.

They can also define what *times* are the active window for each day if it is active.

When selecting this window, they can choose from:

- From the start of the day until a specified time  
- From a specified time until the end of the day  
- Between two specified times  
- All day

*(See Requirement EDP-03-04, EDP-05)*

*Related Person* - When the user selects from the defined list of ‘Enter Manually’ or ‘Select from RMS’ they will be prompted with one of the following;

If manual – a pop-up to say:  
"This feature is not yet available. It will be possible to record the details of the person, to which this demand relates, manually. This will include their...

- Surname and Forenames  
- Date of Birth  
- Address  
- Image  
- Risk / Threat Indicators"

*(See Requirement EDP-03-06)*

If to search, then they should be prompted with a screen that allows them to search for the individual using the defined fields and to select them as the intended person.

*(See Requirement EDP-03-07, EDP-06)*

*Location Type* - When the user selects from the defined list of ‘Fixed Location’ or ‘Geographical Area’ they will be prompted with one of the following;

If fixed then they should be prompted with a screen that allows them to select the desired location, and the chosen radius.

*(See Requirement EDP-03-08, EDP-07)*

If geographical then they should be presented with a map screen that allows them to define/draw the area required, and supplementary controls to allow the selection to be cleared and re-done.

*(See Requirement EDP-03-09, EDP-08)*

In both cases, the user should be able to cancel and return to the Demand Create to reselect a location type*.*

*Required Activities* - the user will be able to select one or more required activities from the defined list (Activity dataset), and subsequently select which of the expected possible actions (Action Taken dataset) they would like to assign for the responding officer to select from.

*Repeat Interval* - the user will be able to select what interval unit they wish to apply from the [defined list](#_Data_Dictionary), and then a value of those units.

A value of 0 defines no interval.

Additional details:

There should be a map on the screen under the ‘Location Type’ selection so that the selected location can be shown as a pin or a polygon/area as appropriate.

The related person searches in ‘Search from RMS’ should use the provided/available staff from the dataset – integration with a true interface is out of scope.

The search should function on the data set correctly.

In the case of the Required Activities, we will allow up to 5 activities per Demand to be added. Whilst there are less than five activities, we should have an add button/feature to allow another to be added.

New Demands successfully saved must be logged, the ‘background’ data is added at the point of saving the record.

If required data is missing at the point of saving then a suitable warning should be presented to the user, and the create screen should remain.

##### App Screen Flow



#### Community Insights

##### Splash Screen

This is to be common/shared across all usage requirements in Insights Apps as indicated in the HLD.

It should behave here exactly as the one detailed in the Insights Demand Creation Application.

*(See Requirement EDP-10)*

##### Record Map/List

This screen should have 2 ‘modes’ – Map View & List View, having 2 ‘screens’ defined is not necessarily an issue if the Solution benefits from it.

The default when the App starts will always be the ‘Map View’, this is a map centred around the device’s current location, the Map ‘Zoom’ should also be set to a defined layer/zoom [*This value will be set for the EDP]*

*(See Requirement EDP-10-02, EDP-11)*

The Officer/Device will be indicated by a ‘pin’ (using default pin/icon settings) and will be a defined, fixed location.

*We do not want the device to use real location data to keep the demo’s simple.*  
  
All Demands within the visible Map Area shown should be shown as icons (fixed locations) or shaded areas (Geographical locations)

|  |  |  |
| --- | --- | --- |
| **Pin/Symbol Type** | **Symbol Name** | **Colour** |
| Fixed Location Demand | marker-flat | ForestGreen |
| Investigation | flag | Crimson |
| Intelligence Report | marker-ball-pin | CornflowerBlue |
| Task | marker-arrow | DarkViolet |
| CAD Incident | flag-triangle | Red |
| Geographical Area Demand (List View Only) | rounded-square | ForestGreen |

|  |  |  |
| --- | --- | --- |
| **Polygon Type** | **Polygon Fill Template** | **Colour** |
| Geographical Area Demand (Map View) | Default template | CornflowerBlue |

The user should be able to zoom in, zoom out, and pan.

Demands should show on the map as they move into the visible map area, whether a ‘pin’ or an area.

*(See Requirement EDP-11-01)*

If the user selects a ‘Pin’ then they should get a ‘pop-up’ Summary of the Record

*(See Requirement EDP-11-04 : EDP-11-09 I where 08/09 indicate moving to EDP-13, this is FROM the summary, summary pop-up is to be consistent on all)*

Detail in the Summary should include:

|  |  |
| --- | --- |
| **Type of Item** | **Summary Information** |
| Individual Location Demand | * Demand Type * Demand Title * Related Information * Person * Surname * Forenames * Date of Birth * Location [Premises Name/Number, Street, Town |
| Geographical Location Demand | * Demand Type * Demand Title * Related Information * Person * Surname * Forenames * Date of Birth |
| Intelligence Report | * Report Reference * Intelligence Title * Event Date * Event Time * Location [Premises Name/Number, Street, Town |
| CAD Incident | * Incident Reference * Opening Code * Closing Code * Event Date * Event Time * Location [Premises Name/Number, Street, Town |

In the List view, the same Records should be shown as on the Map, ordered by Geo Location Demands, then all other records by closest first

For all records the Summary information should be the same as that seen on the Map view.

*(See Requirement EDP-12-01)*

In the List View all items should also have the distance from current location listed in metres (except Geo Location Demands)

In either View, if the user selects ‘More Detail’ on a Demand, then the user should be taken to the Record View Screen – the summary of the other record types will have no further function in the EDP.

*(See Requirement EDP-11-08/09, EDP-12-04, EDP-13)*

From either view, the user should have access to a button to ‘Exit’ the application.

*(See Requirement EDP-11-02, EDP-12-02)*

##### Record View

When viewing the detail, the information shown needs to include:

|  |  |
| --- | --- |
| **Type of Item** | **Summary Information** |
| Individual Location Demand | * Demand Type * Demand Reference * Demand Title * Owning Staff Member / Team * Active Days and Timeframes * Related Information * Person * Surname * Forenames * Date of Birth * Image * Address * Location [Premises Name/Number, Street, Town * Required Activities |
| Geographical Location Demand | * Demand Type * Demand Reference * Demand Title * Owning Staff Member / Team * Active Days and Timeframes * Related Information * Person * Surname * Forenames * Date of Birth * Image * Address * Location [Premises Name/Number, Street, Town * Required Activities |

This should mirror the layout of the Demand View screen, as close as possible, in the Insights Demand Creation App.

Where there are ‘multiple’ sub-records (e.g. Activities) there should be a button/option to expand a pop-up/pop-out - rather than showing all immediately.

There should be buttons to:

* Return to the Map/List screen (based on the one we came from) – ‘Close’
* ‘Respond’ to the Demand *(See Requirement EDP-13-03)*

##### Demand Response

This screen will show all of the detail of the demand still/again and then have the response fields that can be completed by the user.

*(See Requirement EDP-14-01)*

Fields to be captured for the response

|  |  |  |  |
| --- | --- | --- | --- |
| **Field / Property** | **Field Req.** | **Value Used** | **Notes** |
| Response Date | Mandatory | Default to today |  |
| Response Time | Mandatory | Default to now |  |
| Responding Staff Member | Mandatory | Set to current user StaffID | Not editable |
| Other Staff Member | Optional |  |  |
| Activity Response | Mandatory | Select from list stored against the Demand Activity |  |
| Additional Information | Optional |  | Free text (500 chars) |

When a user selects to ‘Respond’ to a Demand, they need to select the ‘Activity’ that they wish to respond to and select the appropriate response from the available list.   
The additional field against an activity can also be completed as a ‘free text’ field with any additional information as needed by the responder.

This should be done for each of the Activities that the officer wishes to respond to.

The user will select to ‘add’ another Staff Member, and the Staff member details entered should be validated against the appropriate Staff List, prior to accepting into the response. They can add up to 3 other staff members.

A response can only be saved if at least one activity has had a response added.

*(See Requirement EDP-14-03 : EDP-14-04)*

A Demand and Activity can have multiple responses recorded against them.

There should be a button to:

* Return to the Map/List screen (based on the one we came from) – ‘Close’

*(See Requirement EDP-14-02)*

##### App Screen Flow



### Reporting

#### Demands

Nothing specified at this time.

#### Audit Information

Nothing specified at this time.

### Audit Actions/Recording

No Auditing is required in the EDP

### Licence Structure/Codes

No licensing integration is expected in the EDP

## Non-Functional Detail

### PA-NFR-006 Performance

App Load times

Page/Screen Load times

Thought should also be given as to how the performance of any cloud components can be monitored/managed

# References

Map Icons are the same as those exposed to the Azure Maps Web API

Map Icons: [Image templates in the Azure Maps Web SDK | Microsoft Learn](https://learn.microsoft.com/en-us/azure/azure-maps/how-to-use-image-templates-web-sdk#list-of-image-templates)

Offline – for consideration, detail released 11th September 2023:  
[Canvas built-in offline is now just one click away! | Microsoft Power Apps](https://powerapps.microsoft.com/en-us/blog/canvas-built-in-offline-is-now-just-one-click-away/)

Bing Maps: <https://learn.microsoft.com/en-us/bingmaps/rest-services/imagery/get-a-static-map>

Azure Maps: <https://learn.microsoft.com/en-us/rest/api/maps>

<https://learn.microsoft.com/en-us/azure/azure-maps/about-azure-maps>

PowerApp Signals: [Acceleration, App, Compass, Connection, and Location signals in Power Apps - Power Platform | Microsoft Learn](https://learn.microsoft.com/en-us/power-platform/power-fx/reference/signals)

Convert Long/Lat -> Metres, this could be useful for triggering Map Refresh:  
[math - How to convert latitude or longitude to meters? - Stack Overflow](https://stackoverflow.com/questions/639695/how-to-convert-latitude-or-longitude-to-meters)

Drawing Polygons:  
[Draw and insert shapes on maps - Power Apps | Microsoft Learn](https://learn.microsoft.com/en-gb/power-apps/maker/canvas-apps/geospatial-map-draw-shapes)

A person smiling with the hand on the face

Description automatically generated with low confidence