V 2.1 (New Features & Edits)

1) adding Utility parameter to frame .db schema

We will change the schema for each .txt file in the frame_logs/ folder. Now there is an additional field that may come after damage {}. This is Utility {}. This follows a similar convention with its respective fields logged in a set convention in the .txt file under frame_logs/ folder. The following assumptions can be made:

a) Utilities will always be present after damage {} in the .txt files.
b) If no utility is present the file will end with the detected damages.
c) For each utility detected in a frame the convention will be

Utility{
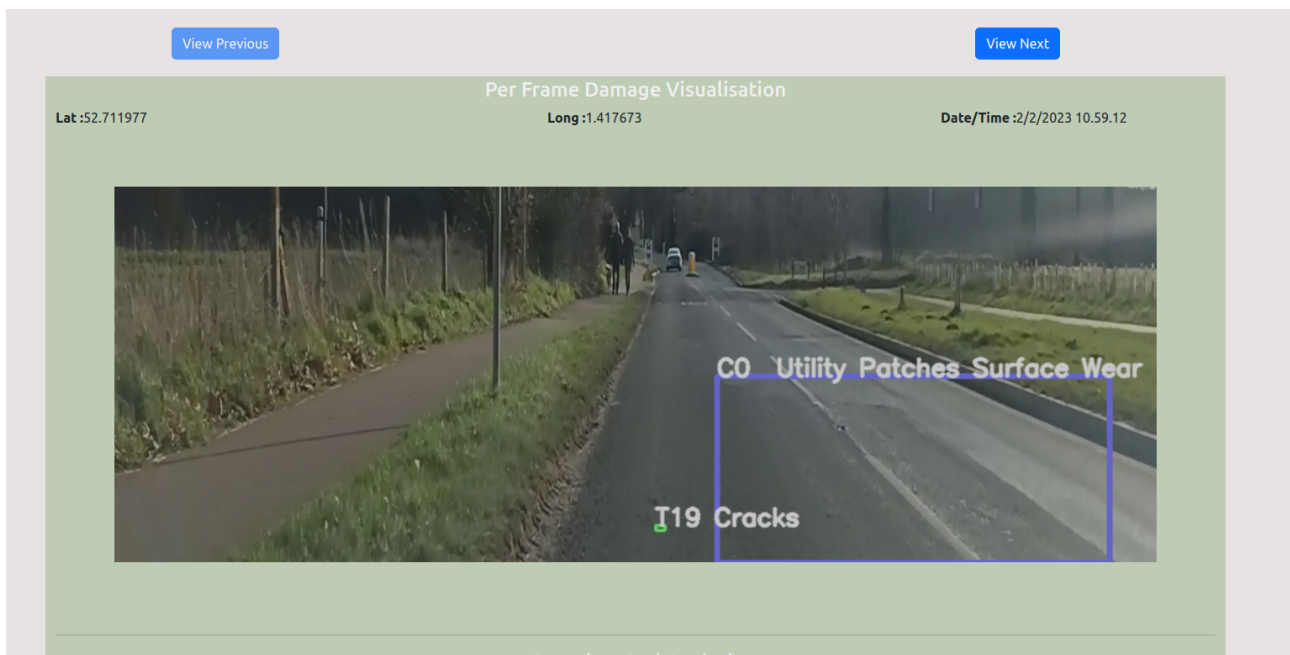id Null *(string)*
Tags None (*string*)
Condition Ok *(string)*
}

An example file with utility type present is shown below
id 3
frame_num 3.png
Repair Flag Low Urgency
Lat .
Long .
Date /
Time .
Road Freespace_x 416.38
Road Freespace_y 50.96
Lane_Marking_Quality 71
Confidence 0
Most_Common_Tags Rutting,Crazing,Potholes
Significant_Damage_Num 0
damage{
id Null
Tags None
Max_Len 0
Max_Wid 0
Area_sq 0
Avg_Depth 0
Max_Depth 0
}
Utility{
id U321
Tags Manhole-Cover
Condition Good
}

In the front-end/views we can follow same convention as 'Damage' for displaying Utilities. For each Utility {} in the .txt file (read by .db) we display the fields in a similar convention below 'Damages'
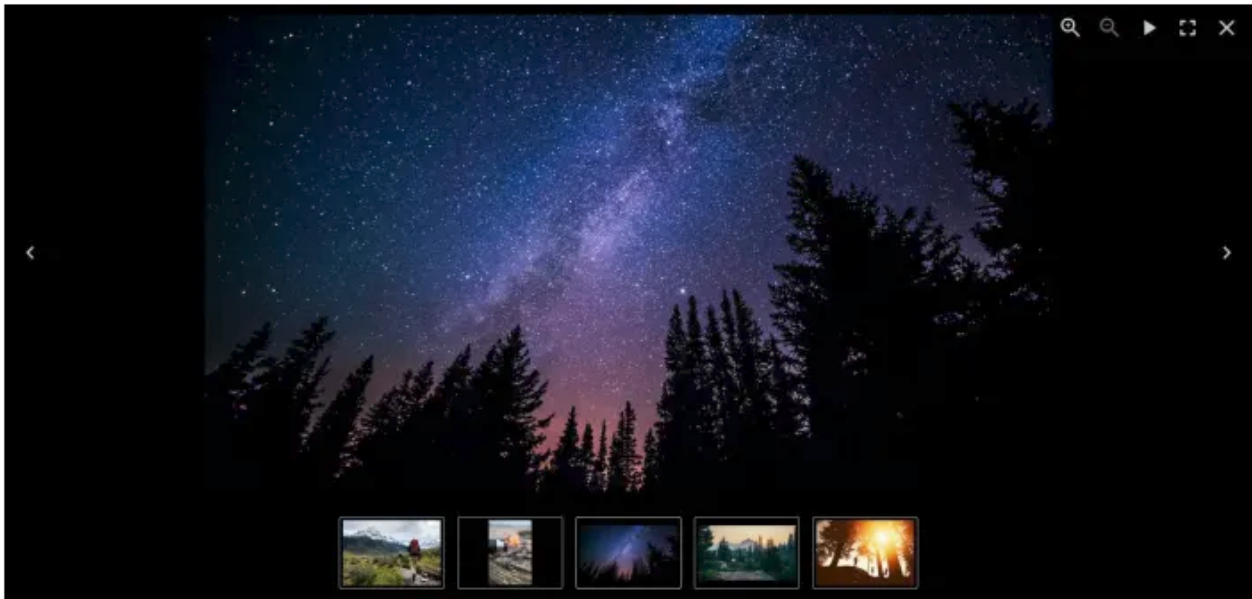

2) Image Sequence Viewer, Previous and Next Button

The View Next, View Previous buttons should link to frame ids. So if we are on frameid 0, and the next frameid is 20 then next will take us to the next available frameid. And view previous to the previous. If we are on frame id 5 and there is a frame id no. 0, then pressing previous will load the page for frame id no 0.0.

Rename these buttons to 'View Next Frame', 'View Previous Frame'.

Then if we change the image viewer to something like this design (right now the images are linked to view previous, view next buttons):

Or any of the lightbox type examples. We are essentially viewing a mini gallery with the images from analysis_1, analysis_2, depth, combined folders. So just need to view these 4 images (if present) as some kind of gallery type view.

3) Process (Error Status Feedback)

Currently when we press 'Process' on a folder, if some error/issue in folder structure we may not receive any feedback that process is not successful.

Can we have a pop up or some nature of feedback with notification processing has not been successful (error pop up)

4) User Module Edit (User types)

Can we add an extra mandatory field to the user schema. User has to specify between two types:

a) Viewer b) Inspector

Can we also make phone number field optional

5) adding Inspector Feedback parameter to frame .db schema

The following fields are not present in the frame .txt (log file) present in the folder. Rather this is a .db field with initial default fields. These can be added to the frame model schema. As the values are set when viewing each frame id.

Inspector Name: *String (Default: Empty String)*
Prediction Quality: *Number* 0-5 (based on the stars selected this can be any 0.5 increment from 0 - 5. So 0 stars, ½ stars, 4 stars, 5 stars etc) *In UI when User hovers and selects the star/rating component this field gets set*
Comments: *String (max 400 characters long)*
If an user of 'Inspector' type they can edit and fill values in these fields. If 'Viewer' they may not make any changes or add/edit values of these fields.

This is the example UI. If default values then Name = Empty, Comments = Empty, Prediction = 0 stars.

https://mui.com/material-ui/react-rating/

For Ratings we can user hover type rating (or similar) component.

If existing then display values of these fields set in dataset.

If user wants to change values && user = 'Inspector' they may press EDIT button and then enter values in these fields. (The name field gets pulled from the Users .db field or name field automatically. User only sets the rating component and enters text in Comments Box and presses Save).

If user wants to clear and restore to defaults && user = 'Inspector', press 'RESET'.