DMHP PROJECT REPORT

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1 STORED PROCEDURES

A *Stored Procedure* is a set of SQL statements with an assigned names, so that it can be shared with multiple applications and can generate dynamic queries as compared to a static query.

It is **abstracted** from the regular code and just called in the API, similar to a function call and returns a cut of the database which are filtered according to the call arguments.

Stored Procedure for the `tbl_training`, `tbl_districtexpense`, `tbl_hrdatainfo`, `tbl_districtmanasadhara` and `tbl_mnsalloaction` tables have been implemented in this project.

Now, rather than creating many API routes, a **single API route** will suffice for both training and district expense Data modules. Also this makes the graphing process simpler.

Here is a list of all the *stored procedures* implemented, their *primary functionalities* and their *argument lists*:

1.1 getTraining

This stored procedure generates a dynamic cut of the `tbl_training` table.

It filters the output based on the following parameters:

- Select a predefined list of columns.
- Group the output by a predefined list of columns.
- Filter by District, Facility, Event, Targeted Group, and Resource IDs.
- Reject all entries lying outside of a given date range.
- Group the output annually, monthly, or quarterly.
- Group the output by calendar year or financial year.

These are the arguments passed to it:

- display
- group_by
- district_list
- facility_list
- event_list
- target_group_list
- resource_list
- start_date
- end_date
- timeperiod_type
- year_type

1.2 getMnsAlloAction

This stored procedure generates a dynamic cut of the `tbl_mnsalloaction` table.

It filters the output based on the following parameters:

- Select a predefined list of columns.
- Group the output by a predefined list of columns.
- Filter by District, Financial Year, and Quarter IDs.
- Select arithmetic operations performed on a select list of columns.

These are the arguments passed to it:

- display
- group_by
- agg
- district_list
- quarterly_list
- financial_year

1.3 getHRData

This stored procedure generates the rolling sum of active and contracted workers extracted from the `tbl_hrdatainfo` table.

It filters the output based on the following parameters:

- Group the output by a predefined list of columns.
- Filter by District and Taluka IDs.
- Reject all entries lying outside of a given date range.

These are the arguments passed to it:

- district_list
- taluka_list
- start_date
- end_date

1.4 getDistrictManasadhara

This stored procedure generates a dynamic cut of the tbl_districtmanasadhara table.

It filters the output based on the following parameters:

- Select a predefined list of columns.
- Group the output by a predefined list of columns.
- Filter by District and Status IDs.
- Reject all entries lying outside of a given date range.
- Select arithmetic operations performed on a select list of columns.
- Group the output annually, monthly, or quarterly.
- Group the output by calendar year or financial year.

These are the arguments passed to it:

- display
- group_by
- agg
- district_list
- status_list
- start_date
- end_date
- timeperiod_type
- year_type

1.5 getDistrictExpense

This stored procedure generates a dynamic cut of the tbl_districtexpense table.

It filters the output based on the following parameters:

- Select a predefined list of columns.
- Group the output by a predefined list of columns.
- Filter by District and Status IDs.
- Reject all entries lying outside of a given date range.
- Select arithmetic operations performed on a select list of columns.
- Group the output annually, monthly, or quarterly.
- Group the output by calendar year or financial year.

These are the arguments passed to it:

- display
- group_by
- agg
- district_list
- status_list
- start_date
- end_date
- timeperiod_type
- year_type

2 PARAMETERS

display	This column specifies the list of columns that will be included in the query
group_by	The resulting columns will be grouped by these values
agg	This column specifies what will be included in the aggregation query
district_list	The output will contain values with DistrictIDs present in this list
start_date	This column specifies the starting point of date filtration
end_date	This column specifies the culmminating point of date filtration
timeperiod_type	This specifies whether the query is ordered monthly, quarterly, or yearly
year_type	Specifies what type of output is generated - financial year or calendar year
status_list	The output will contain values with StatusIDs present in this list
taluka_list	The output will contain values with TalukaIDs present in this list
quaterly_list	The output will contain values with DistrictIDs present in this list
financial_year	This is a date proxy for the getMNSAlloAction stored procedure
facility_list	The output will contain values with FacilityTypeId present in this list
event_list	The output will contain values with EventIDs present in this list
target_group$_l$ist	The output will contain values with TargetGroupIDs present in this list
resource_list	The output will contain values with ResourceIDs present in this list