Staff Management Utility

Software User Manual

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01 Introduction

System Overview

Staff Management Utility (SMU) is based on the Google Spreadsheet, which contains three main functions, including generate graphical organisational charts, search function and generate reports about the information available in the system. Refer to the full documentation of each feature for all details. The purpose of this documentation is to help users know how to use this system.

Installation Requirements

Software	Platform	Version
Chrome Browser	Windows or Linux	86.x.x
JavaScript	Windows or Linux	ECMAScript 2018
Node.js	Windows or Linux	12.x.x
Google Spreadsheets	Windows or Linux	4.x.x

Note: The user also needs to have a Google account with privileges to edit the spreadsheet.

Implementation Details

Spreadsheet App comprises 4 individual sheets. Maptek, SearchOperation, SearchResult, and EmailTemplate.

Sheet Name	Function
Maptek	contains all the necessary details of employees at Maptek.
SearchOperation	provides the end-user with the search function.
SearchResult	displays the search results.
EmailTemplate	contains the email template and the necessary keys.

Introduction

Architectural Design

Microkernel architectural patterns or plugin architectural patterns are preferred to fulfill the required functionality. One of the biggest advantages of this architecture is that each plugin developed is independent and runs independently. Another advantage is that it would include less code with minimum bugs and fails.

Plugins like search, report generation, and organizational chart are built on the google spreadsheet. Each plugin is developed independently, and the change or upgrade on one will not affect others.
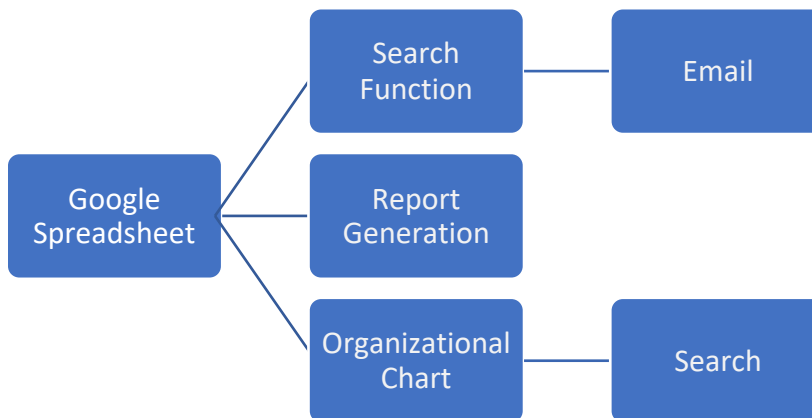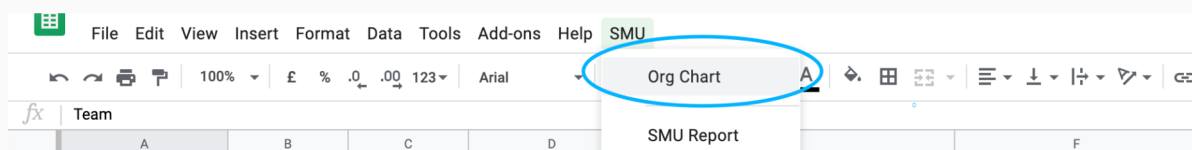
Generating Charts

## ■ Generating Organisational Charts

Step 1: Click on '**Maptek**' sheet on the bottom to start.

Step 2: Click '**SMU**' in the menu and click the '**Org chart**' to translate line items into a whole organisational charts.


Step 3: The drop-down menu is a filter to assist you in generating an independent chart based on different elements, such as building and last name. For example, the following chart shows the Building-D's organisational chart.
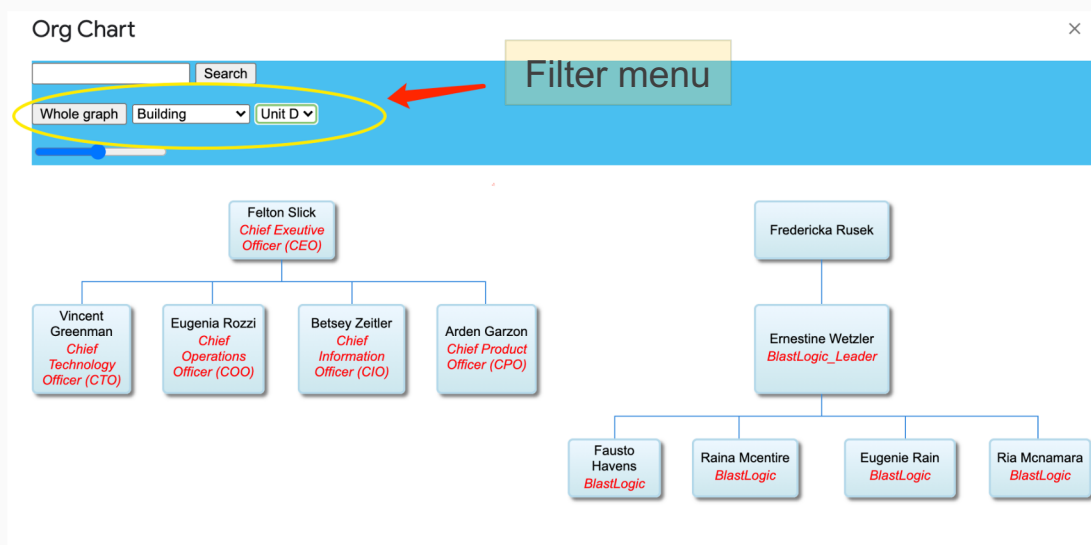
Generating Charts

■ Searching an Employee on the Chart

This searching function is based on the generated chart. If you enter a keyword in the search bar, boxes containing expected result will be highlighted in **Yellow**. Hover the mouse over it to display more detailed information. For example, the picture below shows the result when searching for 'Vincent':
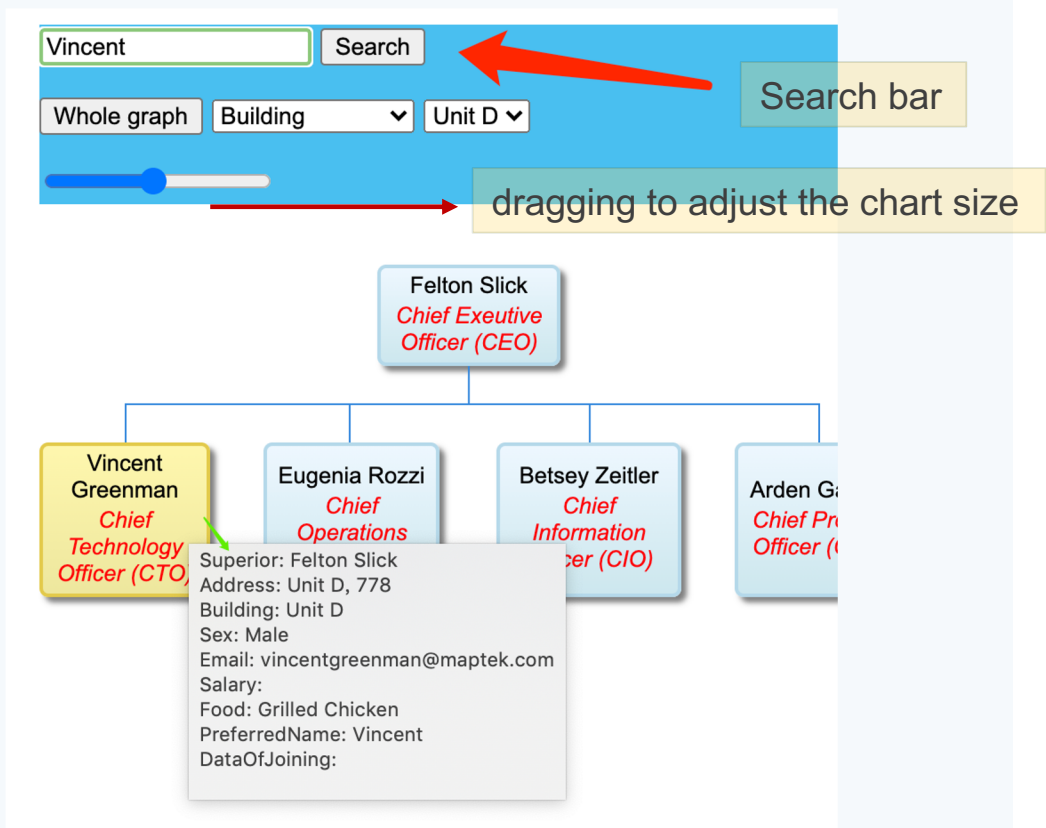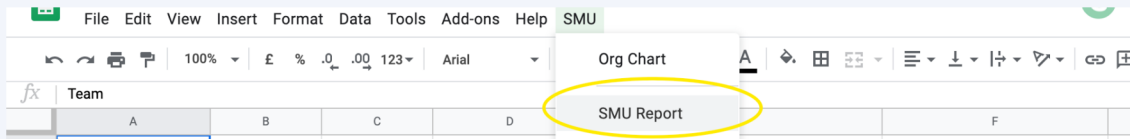

This searching function is based on charts. The next section will illustrate a searching function based on Spreadsheet.

Generating Reports

● **Generating Reports**

Step 1:

Click on the second option, **SMU Report**. The full report contains all the sub reports which will be mention below..

If a full report is not what you wanted, you have the option to choose to generate a smaller report. Select the third option, **Report List**, which has the following options:

- ■ People-Building Report
- ■ Team-Building Report
- ■ People-Team Report
- ■ Ratio Report

Choose the sub report you want to generate reports. After it finishes running, a message box will pop up, saying "Successful".

Generating Reports

Step 2:

• Click the OK button to exit. The report will be generated in Google Document, which will be located in your Google Drive.

• Refresh your Google Drive if you did not see it. You will find a new Google Docs file in your Google Drive.

• Double click to open up the Google Doc for editing or to inspect.

● Saving an Report as PDF

To save the Google Doc in PDF, under the Menu section, look for:

File -> Download as -> PDF Document.
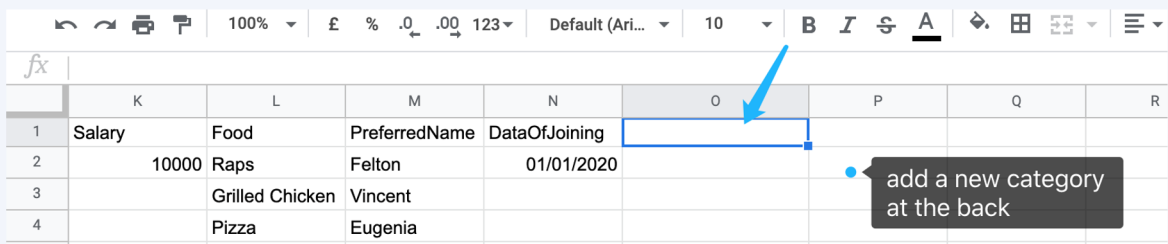
Generating Reports

● **Things to remember:**

1. Do not change format in the spreadsheet, it has to remain as is.
2. If you want to add a new employee, please refer to the next section below.
3. Avoid tempering with the Script editor, it may lead to execution failure when running the program.

● **Editing the content in Spreadsheet**

On the **Maptek** tab, you will see all the employee information in the spreadsheet. Choose a new column for adding a new employee or find a column that you want to edit. Follow the format in this current sequence when adding/editing the details of an employee:

Team → First Name → Last Name → ... → DataOfJoining

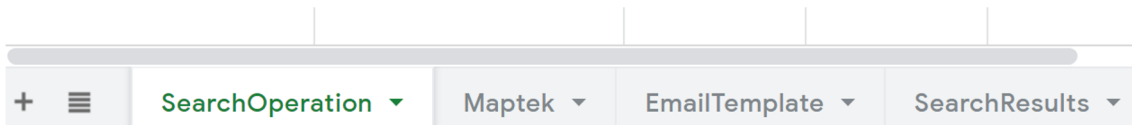If a new category is required, please add it at the back, i.e. picture below.

Searching by Conditions

● **Searching by conditions**

Step 1: Click 'SearchOperation' button on the bottom to open the search page.

Step 2: Type the keywords of search condition(s) in the according box(es).

For the items of team, superior, position and sex, there are also drop-down lists which can be clicked to choose an existing option.
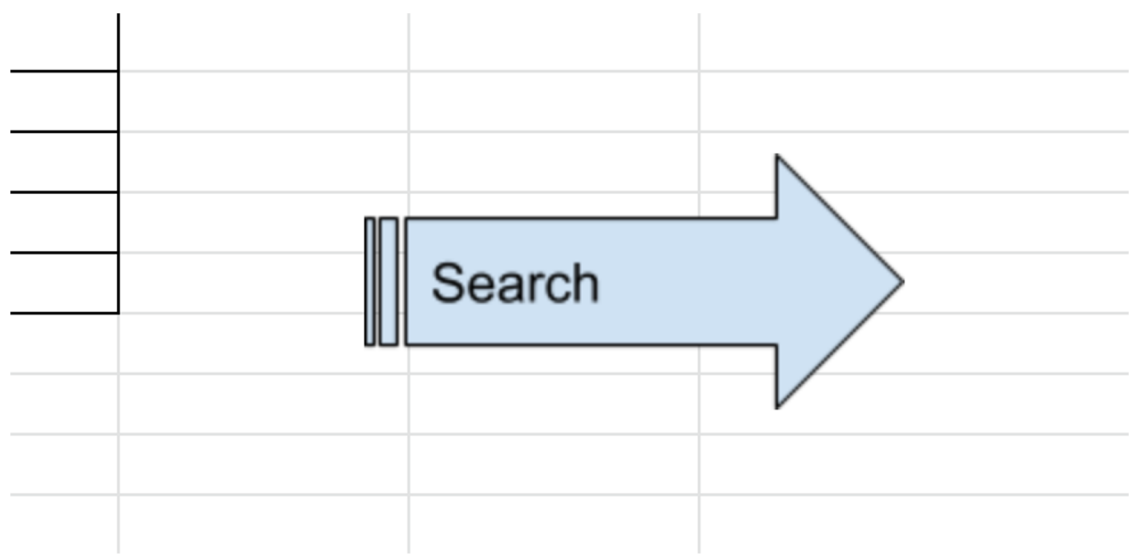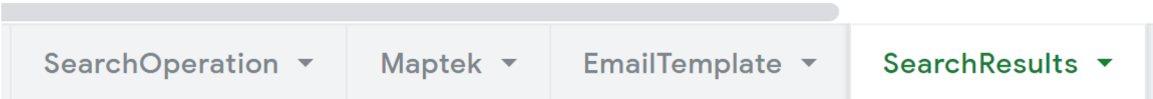
Searching by Conditions

● **Searching by conditions**

Step 3: Click the '**Search**' button on the right side of the search condition list.

Step 4: Click "**SearchResults**" button on the bottom to view the result sheet.

Searching by Conditions

● **Emailing employees who meet the conditions**

Step 1: Open the email template editing page by clicking the "EmailTemplate" button on the bottom.

SearchOperation ▼   Maptek ▼   EmailTemplate ▼   SearchResults ▼

Step 2: Edit the email content.

The employees' information items can be used in the email by making it as a Key with a pair of brackets {}. The Key will be replaced by the according item(s) of the email receiver when sending the mail. More Keys can be added with new columns introduced to the database.

Email Subject	Remiender: Get Well Soon.
Email Body	Hello {PreferredName}, Today we are offering free {Food} for you, From, Maptek.
Key	{Team}
Key	{FirstName}
Key	{LastName}
Key	{FullName}
Key	{Position}
Key	{Superior}
Key	{Address}
Key	{Building}
Key	{Sex}
Key	{Email}
Key	{Salary}
Key	{Food}
Key	{PreferredName}

Searching by Conditions

● Emailing employees who meet the conditions

Turn to the "**SearchResults**" sheet and click the "**Send Mail**" button.
Every Employee on the sheet will receive an email.

Leader	Queenie	Hathcock	Queenie Hathco	Head of technical services
Send Mail	sha	Lenox	Tamesha Lenox	Technical services_Leader
Technical service	Mirna	Vanhoose	Mirna Vanhoose	Technical services
Technical service	Kazuko	Munn	Kazuko Munn	Technical services
Technical service	Pasty	Raysor	Pasty Raysor	Technical services
Technical service	Laurice	Wallach	Laurice Wallach	Technical services
Technical service	Paige	Mott	Paige Mott	Technical services
Technical service	Rosio	Wattenbarger	Rosio Wattenbar	Technical services
Technical service	Regine	Harkins	Regine Harkins	Technical services
Technical service	Marketta	Rish	Marketta Rish	Technical services
Technical service	Rosalee	Blakeman	Rosalee Blakem	Technical services
Technical service	Micheline	Hibbard	Micheline Hibbar	Technical services
Technical service	Kenyatta	Presutti	Kenyatta Presutt	Technical services
Technical service	Karolyn	Wishart	Karolyn Wishart	Technical services

| + | ☰ | SearchOperation ▼ | Maptek ▼ | EmailTemplate ▼ | SearchResults ▼ |