Thank you Zi Kang. I'm Wei Ping and I have added the Statistics feature to MooLah.	
In total, the statistics feature comprises of 3 commands. Read off, each named after its specific use case	Tab mode to enter autocomplete Exit after scrolling
For my demo, let's first choose a budget	ListBudget EditBudget SwitchBudget SwitchPeriod
I will first list all the budgets	
And now I'm more interested in outside school, a daily budget, so let's switch to it	Switchbudget d/outside school
And I want to go to the past window say 28-October. So we do switch it there	Switchperiod d/28-10
In this current window from 0000 to 2359 we see Food and Entertainment in a roughly 1:3 amount proportion	
To make sense of data in a single interval, we can use the first command statsbasic to get a high level summary of this expenses	Statsbasic (type till parameters)
This supports optional prefixes start date and end date, and not typing anything, gives me the stats in this current window. The output is a Pie Chart, showing the same rough 1:3 ratio as seen previously.	Press enter
Of course, specifying both the start date and end date will allow users to see the interval specified like checking beyond 28-10 and perhaps till 30-10, and more expenses are populated in the pie chart, shown only in the future windows.	Statsbasic sd/28-10 ed/30-10
The next command statscompare allows the users to make sense of data across 2 periods to compare their similarity and differences in frequency and total amount of money spent	Statscompare
It takes 2 compulsory start date prefixes, sd1 and sd2 and constructs each interval using the period of the current budget. Now, let us try comparing the same interval we're all very familiar with	Type in sd1/28-10 sd2/28-10

We can see that the output is a Table view, showing 2 sets of columns, overlap for similarity and differences for differences.	
As it is the same period, all the 2 expenses we seen earlier is reflected only in the similarity columns.	
What if we compare the current filled period with another unfilled period in the future like 12-12?	Close tab mode Backscroll and type 12-12
We can see that the difference column is now populated while the similarity column is not as they are completely different. The difference uses the interval from the sd2 prefix minus the interval from the sd1 prefix, which explains the negative values	
What if we have expenses across multiple windows like 26,27,28 so forth, and want to compare all of them at once?	
We can do this statstrend command, which like the first command also has 2 optional prefixes, but now also take in a compulsory mode prefix, budget or category	
Using the category mode, shows us all the total amounts of each window represented by their start date and split into different trend lines, 1 for each category	Statstrend mode/category
The budget mode, gives us a chance to see how often you exceed the budget in each window of time, using only 2 trend lines.	Statstrend mode/budget
These are all the 3 stats commands, a different representation for a different use case. They complement each other very well, hence users will have a choice on how much they want to analyse. More info on how they interact with different prefix configurations as well as the modifications on the budget is made known on our User Guide	

Expected Script	Expected action(if no bugs)	Bug detected and backup script
Thank you Zi Kang, I'm Wei Ping and I added the ability for users to visualise statistics. In total, the statistics comes in 3 different use cases, that of which comes in 3 different commands which supports different prefix configurations. For my demonstration, let me edit the budget back to day period and with the window start date on 28-10-2019 By the way, in case it's not covered, if a year is not specified, the default year is the current year	View Budget List Editbudget pr/day List → Edit → Switch switchbudget Switchperiod t/28-10 Editbudget sd/28-10 is useless for very small periods like days, will still get normalized to latest one	
If Jim wants a high-level summary of the money spent from their categorical expenses in a given period of their current budget, he can type stats, which takes in 2 optional prefixes sd and ed. Let's say we're interested in the expenses on a single day like 28-10-2019, like sd ed fall on the same day.	Stats sd/28-10 ed/28-10	
After typing, MooLah will return the PieChart from 28-10 to 28-10, as we can see on the Primary Budget Expense List, there is $3.50 chicken rice and $10 Infinity War movie on 28-10-2019	View Primary Budget	
, so Entertainment is roughly 3x that of Food, which shows this percentage. If we specify only start date and only end	Stats sd/29-10	

date, the interval of interest will be constructed using the period of the primary budget, ~~in this case day, and we should get back the same pie chart~~ Let's try sd/29-10		
And verify later by switching to the future period that it works	Switchperiod t/29-10	
Of course using 28-10 as the end date should also return the same Pie Chart as the first result	Stats ed/28-10	
If we don't specify the start date and the end date, the interval of interest will be just the window of the current budget, of course that means the same window. If we change the window, while keeping the same period which is a day long, we should see a different pie chart. Changing back to the start date of 28-10 once again.	Stats 3 categories like before	
If Jim wants a side-to-side comparison of the money spent from their categorical expenses in 2 intervals of their current budget, he can type statscompare, which takes in 2 compulsory prefixes sd1 and sd2. Let's try a simple use case of the same interval as what we see in the current window, but now both intervals are exactly the same, because intervals is constructed using the budget window period too.	Statscompare sd1/28-10 sd2/28-10	
After typing, MooLah will return a table view, which has 2 pairs of information.		

The first column is the category column. The next 2 pairs is the similarity amount of money spent and the frequency of entries. Given that this interval is exactly the same, we should expect non-negative numbers in both the Food and Entertainment categories as reflected in the Primary Budget Expense List. The next 2 columns is the difference amount of money spent and the frequency of entries. Given that the interval is exactly the same, we should expect to see only zero entries. By the way the difference is calculated using the 2nd interval – 1st interval. (interval bounded by sd2 – interval bounded by sd1)		
The only way to vary your interval size is by changing the period of the window, which is also constrained by day, week, month, year. Let me increase the window period while keeping REVERTING SD TO 28-10 ONCE AGAIN to switch modes, and of course the expense list gets updated due to initial population of SampleDataUtil.	Editbudget pr/week sd/28-10	
To introduce the use of mainly the difference columns, let me use the interval equal to this current	Statscompare sd1/28-10 sd2/ 28-10-2020	

window, which is an existing period before the current date, while let's take the next window guaranteed to be empty, say some random date in 2020. As this is a disjoint interval, the similarity columns should be zero-ed out.		
We should expect to see non-positive values, as the 2nd interval, being zeroed and 2nd – 1st.		
If we flip the periods around it should be positive. Now let's take a harder example, say the interval of this current window and the previous window that starts 7 days before.	Statscompare sd1/28-10-2020 sd2/28-10	
If Jim wants to see the growth of the money spent from their categorical expenses in specified units of time between the interval specified in the current budget, he can type statstrend, which supports 2 optional prefix similar to the summary command but takes in compulsory mode(category or budget). Taking into account the limitation on the number of points to be shown, we decide to show at most 34 points. If an interval is not specified, it will be constructed either from 34 cycles from the start date or end date, or from 17 cycles		

before the start date of the current window of the budget till 17 cycles after the same start date		
After an interval is specified, the first point generated will be representing the window immediately after the start date of the window.		
For example, let's just use the daily mode and use from the current window 28-10-2019 once again, and we'll see that the first point is on XXX.	Editbudget pr/day sd/28-10-2019 Statstrend mode/category	
Now if I shift the current window backwards, and if nothing is available there, this means I should see 1 more blank dot on the left	Switchperiod t/27-10 Statstrend mode/category	
Let's try budget mode using the same specifications. In this case, the time ticks on the x-axis are the same, but the trend lines represent the budget limit as well as the total expenditure in the same time period. That's all for my statistics features.	Statstrend mode/budget	

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On google chrome

https://teammatesv4.appspot.com/page/studentFeedbackSubmissionEditPage?courseid=CS2103-Aug2019&fsname=Final+Peer+Evaluation+%28Part+1%29&key=9B30D0C6A59BB4D720373816C59F96E777D9766517EA3A9006F2C95DD64F0A76E70D61FA4A24863E2413E419C0DE2189&studentemail=e0272512%40u.nus.edu

Rules

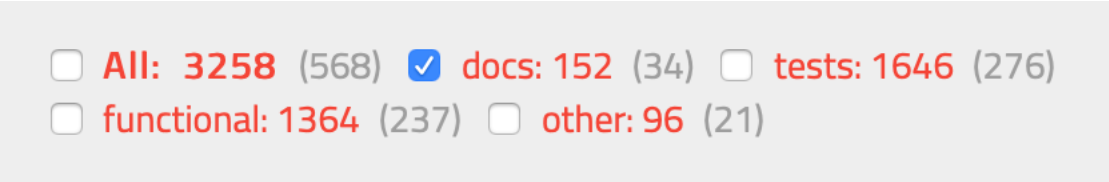
https://nus-cs2103-ay1920s1.github.io/website/schedule/week13/admin.html

Model history commit
https://github.com/se-edu/addressbook-level4/pull/440/files

PPP to see repo code and responsibility

https://ay1920s1-cs2103t-t11-1.github.io/main/team/ryoarmanda.html

Ryo



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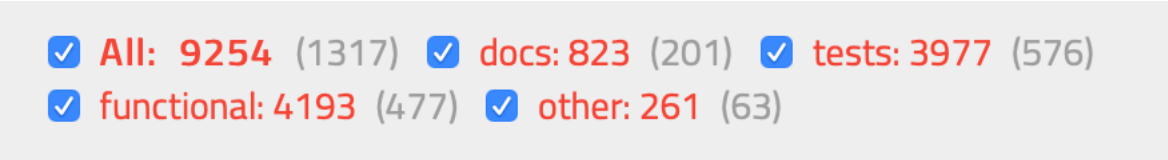
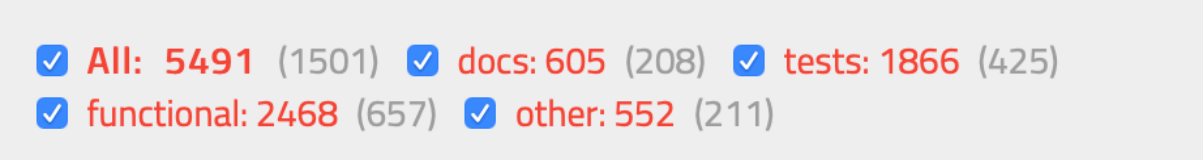
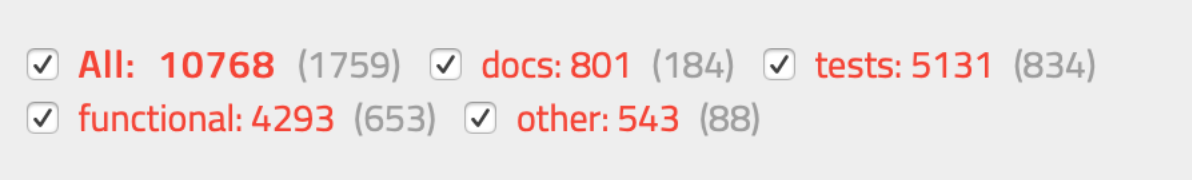


Mine



Brian



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