

# User Guide

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*March 2020*

*Version 1.3*

*IS02PT-GRP-10-SavingRobotAdvisor*

## Document Revisions

Date	Version Number	Document Changes
31/03/2020	1.0	Initial Version
10/04/2020	1.1	Updated Version
19/04/2020	1.2	Updated Version
03/05/2020	1.3	Updated Version

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# 1 Introduction

## 1.1 Welcome to SRA

*Are you satisfied with your savings accounts and credit cards?*

*Do you know that there are hundreds of combinations and choices to suit you?*

*Does “My credit card sucks!” sounds familiar?*

*Do you notice leaving S\$10,000 savings in your POSB Kids Account for 10 years may cost you a return trip to Europe?*

*If you have similar concerns, please let us welcome you to the SRA world.*



*From this user guide you will be able to get basic idea of what is a Saving Robot Advisor and how it is going to help.*

*Basically, different saving accounts are focused on different groups of customers. These groups of customers are with various amount of income and with diverse habits of consuming. Thus, a saving account may suits your close friend but not necessarily the best choice for you.*

*The Saving Robot Advisor then is born to help you choose the most appropriate accounts & cards as well as maximizing the most of your financial benefits.*

## 1.2 System Overview

*The Saving Robot Advisor is a minimum viable product. The designers keep the application easy to access and direct in outcome.*

*The system is mainly focused on saving interests as well as credit cash back, one for saving, one for earning. Of course in future, other modules such as mortgage loans, car loans, structured deposits and unit trusts might be taken into the scope.*



*To bear “easy for everyone to access” in mind, the Saving Robot Advisor requires no username or password to start with. Main functional page will be directly shown to users.*

*Research shows over 70 per cent of Singapore’s emerging affluent used savings accounts. In other words, majority of the population who with monthly income between S\$5,000 and S\$10,600 are using saving accounts. Then how to choose a proper account will not be a small issue anymore.*

*Besides saving interests, credit cards’ cash back is another part which maximize daily earn. There are hundreds of credit cards on the market. To choose the ones suit different life styles is another headache.*



*The Saving Robot Advisor is focused on absolute monetary value which is saving interests plus credit rebate. There will be no points or miles in the scope. Bank wise, all banks on the market are taken into consideration. Users won't miss anyone.*



*The system has identified the highest interest savings account and cash back credit card from each bank. Based on that, 8 savings accounts and credit cards pairs are shortlisted through primary and secondary research.*

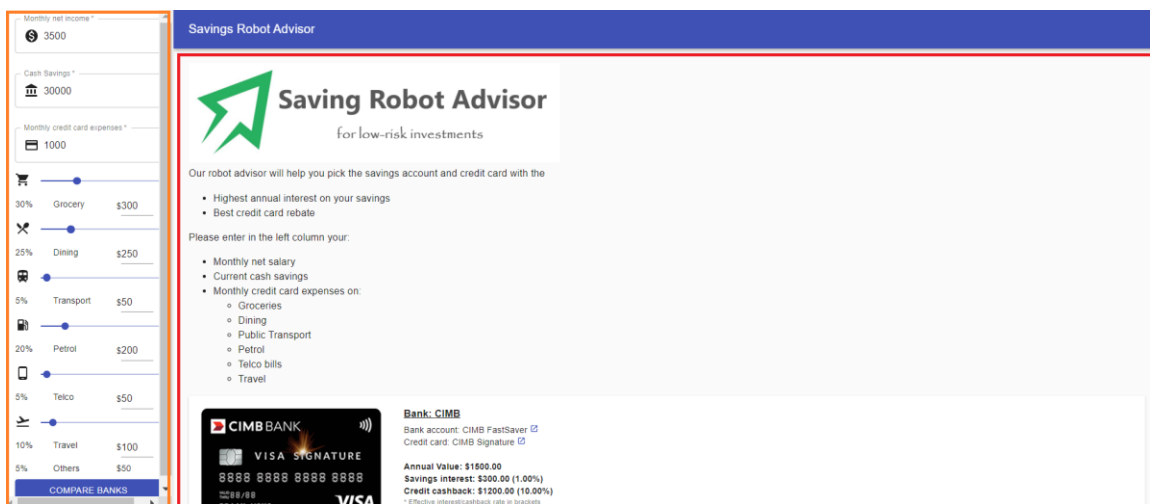
## 2 Process & Module

### 2.1 User Interface Overview

*The User Interface is relatively straight forward.*

*We have an information panel on the left and a result panel on the right.*

*The Saving Robot Advisor will help to pick the savings account and credit card with the highest annual interest and best credit card rebate.*



The screenshot displays the Saving Robot Advisor interface. On the left is the 'Information Panel' with input fields for: Monthly net income (\$3500), Cash Savings (\$30000), Monthly credit card expenses (\$1000), and a list of expenses (Grocery \$300, Dining \$250, Transport \$50, Petrol \$200, Telco \$50, Travel \$100, Others \$50). On the right is the 'Result Panel' showing the advisor's goal (Highest annual interest and Best credit card rebate), a list of inputs, and the recommended CIMB Bank account (CIMB FastSaver) and credit card (CIMB Signature) with an annual value of \$1600.00, savings interest of \$200.00 (1.00%), and credit cashback of \$1200.00 (10.00%).

Information Panel

Result Panel





## 2.2 Information Panel


*Users may find 3 rectangle boxes in Information Panel to fill in – “Monthly net income” “Monthly credit card expenses” and “Cash Savings”.*

Besides, 6 major expense groups are also listed out. The sum up of amount in sub categories should equals to Monthly credit card expenses.


Monthly net income \*


\$ 3500

Cash Savings \*

 30000

Monthly credit card expenses \*


 1000



30%

Grocery


\$300



25%

Dining


\$250



5%

Transport


\$50



20%

Petrol


\$200



5%

Telco

\$50



10%

Travel

\$100

5%

Others

\$50

COMPARE BANKS




## Saving Robot Advisor


for low-risk investments

*With nothing filled in & pressing “COMPARE BANKS”, the boxes will turn red to alert user that the input is invalid.*


Monthly net income \*



Monthly credit card expenses \*



Cash Savings \*






*Pressing on “COMPARE BANKS” button with a valid input will bring out the results in the Result Panel.*

## 2.3 Result Panel

*Result list will be shown in the “Annual Value” descending order.*

*This means, considering only from Interest plus cash back point of view, the very first card is the ideal one for this “income/expense/saving” combination.*

Savings Robot Advisor


	<p><b>Bank: BOC</b></p> <p>Bank account: <a href="#">BOC SmartSaver</a></p> <p>Credit card: <a href="#">BOC Family</a></p> <p><b>Annual Value: \$1272.00</b></p> <p><b>Savings interest: \$72.00 (2.40%)</b></p> <p><b>Credit cashback: \$1200.00 (5.00%)</b></p> <p><small>* Effective interest/cashback rate in brackets</small></p>
	<p><b>Bank: UOB</b></p> <p>Bank account: <a href="#">UOB ONE</a></p> <p>Credit card: <a href="#">UOB ONE</a></p> <p><b>Annual Value: \$1255.50</b></p> <p><b>Savings interest: \$55.50 (1.85%)</b></p> <p><b>Credit cashback: \$1200.00 (5.00%)</b></p> <p><small>* Effective interest/cashback rate in brackets</small></p>
	<p><b>Bank: CIMB</b></p> <p>Bank account: <a href="#">CIMB FastSaver</a></p> <p>Credit card: <a href="#">CIMB Signature</a></p>


*Drag the scroll bar on the right will show the rest cards in the list accordingly.*

*On the right side of each card, more details will be shown as below.*


*“Bank account” indicates the account name which is recommended.*


*“Credit card” indicates the credit card name which is recommended.*

*The blue icon  at end of the line will redirect user to the official web page of this bank account or credit card.*



**Bank: Citibank**

Bank account: Citi MaxiGain 

Credit card: Citi Cashback 

**Annual Value: \$901.50**

**Savings interest: \$1.50 (0.05%)**

**Credit cashback: \$900.00 (3.75%)**

\* Effective interest/cashback rate in brackets

*“Annual Value” combines “Savings interest” and “Credit cashback” giving a total earn annually.*

*“Saving interest” is calculated from “Cash Savings” (here SGD3000) multiplied by interest rate (here 0.05%) which is stored in the system knowledge base.*

*“Credit cashback” is based on annual credit card expenses multiplied by annual cash back rate which is saved in the system knowledge base as well.*

Monthly net income \*

\$ 5000

Monthly credit card expenses \*

2000

Cash Savings \*

3000



**Annual Value: \$901.50**  
**Savings interest: \$1.50 (0.05%)**  
**Credit cashback: \$900.00 (3.75%)**  
\* Effective interest/cashback rate in brackets

## 3 Appendices

### Useful links

<i>DBS Multiplier</i>	<a href="https://www.dbs.com.sg/personal/deposits/bank-earn/multiplier#">https://www.dbs.com.sg/personal/deposits/bank-earn/multiplier#</a>
<i>POSB Everyday Card</i>	<a href="https://www.posb.com.sg/personal/cards/credit-cards/posb-everyday-card">https://www.posb.com.sg/personal/cards/credit-cards/posb-everyday-card</a>
<i>BOC SmartSaver</i>	<a href="https://www.bankofchina.com/sg/pbservice/pb1/201611/t20161130_8271280.html">https://www.bankofchina.com/sg/pbservice/pb1/201611/t20161130_8271280.html</a>
<i>BOC Family Card</i>	<a href="https://www.bankofchina.com/sg/bcservice/bc1/201605/t20160503_6891836.html">https://www.bankofchina.com/sg/bcservice/bc1/201605/t20160503_6891836.html</a>
<i>UOB One Account</i>	<a href="https://www.uob.com.sg/personal/save/chequeing/one-account.page">https://www.uob.com.sg/personal/save/chequeing/one-account.page</a>
<i>UOB One Card</i>	<a href="https://www.uob.com.sg/personal/cards/credit/one/">https://www.uob.com.sg/personal/cards/credit/one/</a>
<i>SC Bonus\$aver Account</i>	<a href="https://www.sc.com/sg/save/current-accounts/bonussaver/">https://www.sc.com/sg/save/current-accounts/bonussaver/</a>
<i>SC Unlimited Cashback Credit Card</i>	<a href="https://www.sc.com/sg/credit-cards/unlimited-cashback-credit-card/">https://www.sc.com/sg/credit-cards/unlimited-cashback-credit-card/</a>
<i>CITI MAXIGAIN SAVINGS ACCOUNT</i>	<a href="https://www.citibank.com.sg/gcb/deposits/mxgn-savacc.htm">https://www.citibank.com.sg/gcb/deposits/mxgn-savacc.htm</a>
<i>CITI CASH BACK CREDIT CARD</i>	<a href="https://www.citibank.com.sg/gcb/credit_cards/dividend-card.htm">https://www.citibank.com.sg/gcb/credit_cards/dividend-card.htm</a>
<i>OCBC 360 ACCOUNT</i>	<a href="https://www.ocbc.com/personal-banking/deposits/360-savings-account">https://www.ocbc.com/personal-banking/deposits/360-savings-account</a>
<i>OCBC 365 CREDIT CARD</i>	<a href="https://www.ocbc.com/personal-banking/cards/365-cashback-credit-card">https://www.ocbc.com/personal-banking/cards/365-cashback-credit-card</a>
<i>Maybank Save Up Account</i>	<a href="https://www.maybank2u.com.sg/en/personal/saveup/save-up-programme.page">https://www.maybank2u.com.sg/en/personal/saveup/save-up-programme.page</a>
<i>Maybank Family &amp; Friends Card</i>	<a href="https://www.maybank2u.com.sg/en/personal/cards/credit/maybank-family-and-friends-mastercard.page">https://www.maybank2u.com.sg/en/personal/cards/credit/maybank-family-and-friends-mastercard.page</a>
<i>CIMB FastSaver Account</i>	<a href="https://www.cimbbank.com.sg/en/personal/products/accounts/savings-accounts/cimb-fastsaver-account.html">https://www.cimbbank.com.sg/en/personal/products/accounts/savings-accounts/cimb-fastsaver-account.html</a>
<i>CIMB Visa Signature</i>	<a href="https://www.cimbbank.com.sg/en/personal/products/cards/credit-cards/cimb-visa-signature.html">https://www.cimbbank.com.sg/en/personal/products/cards/credit-cards/cimb-visa-signature.html</a>

## 4 About

*NUS-ISS*

*This Machine Reasoning course is a part of Graduate Certificate in Intelligent Reasoning Systems, Master of Technology in Intelligent Systems offered by NUS-ISS.*

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