

# Route Advisory System (RADS)

**RAS-Group,  
School of Computing, NUS**

## Scripts for Demo

### 1. Launch RADSMM

Note: This is to be done before the demo proper.

### 2. System Introduction

This is the main screen that will be presented to the user.  
Over here we have the map of Singapore.

The gray lines are the roads, the little gray dots are the many bus stops that cover the whole island; and the yellow lines are the MRT tracks.

The yellow patch over here is the Central Business District or CBD.

Over here is what we call the Command Window.

These buttons over here [GIS buttons] allow the user to navigate within the map and these red buttons [RADS buttons] link directly to the multimodal solver as you will see later.

The window over here is what we call the Trip Information Window where the details of the multimodal trip will be displayed.

[if asked about the little corner window]

I'm glad you asked. This little window over here displays the coordinate location of any point that is clicked on the map.

### 3. Demo Proper

**Basic Demo:      Minimize Time or Fare [NUS → Parkway-Parade]**

Source      -- NUS, S15

Destination -- Parkway Parade

Preferences – *Minimize Time*, Start Time 5:00pm

***Optimal Trip: 65 minutes and fare \$2.60***

Preferences – *Minimize Fare*, Start Time 5:00pm

***Optimal Trip: 81 minutes and fare \$1.30***

**More Demo: Effect of Starting Time [Expo → Parliament House]**

Source -- Singapore Expo.

Destination -- Parliament House.

Preferences – *Minimize Time*, Start Time 5:05pm

***Optimal Trip: 43 minutes and fare \$2.50***

Preferences – *Change Start Time to 5:00pm*

***Optimal Trip: 41 minutes and fare \$2.50***

[Highlight: Faster travelling time (by 2 minutes).

Because at North Bridge Road stop, we can board an earlier bus]

#### **4. System Configuration**

**Pentium-2 Desktop/Notebook**

CPU -- P233MMX

RAM -- 64Mb

**RADS Disk Space Used:**

Solver ~ 500Kb

Data ~ 1Mb

GUI ~ 19Mb

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### System Demo

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#### Scenario 1: Basic Demo

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Source -- NUS, S15  
Destination -- Parkway Parade

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##### Input 1:

Preference -- 100% Time, 0% Fare, Start Time 5pm

##### Output:

Optimal Trip: 65 minutes and cost \$2.60

Trip details:

6	0	Walk to AYE,
11	60	Take Bus 198 to Buona Vista Road (near BV MRT station)
3	0	Walk to Buona Vista MRT station
28	140	Take MRT to Paya Lebar station
4	0	Walk to bus stop on Paya Lebar Road
12	60	Take Bus 76 to Marine Parade Road (opp Parkway Parade)
1	0	Walk to Parkway Parade
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65	260	
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##### Input 2:

Preference -- 0% Time, 100% Fare, Start Time 5pm

##### Output:

Optimal Trip: 81 minutes and cost \$1.30

Trip details:

6	0	Walk to AYE,
74	130	Take Bus 197 to Marine Parade Road (opp Parkway Parade)
1	0	Walk to Parkway Parade
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81	130	
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**Input 3:**

Preference3 -- 0% Time, 100% Fare, Start Time 5:05pm

**Output:**

Optimal Trip: 76 minutes and cost \$1.30

Trip details:

6	0	Walk to AYE,
69	130	Take Bus 197 to Marine Parade Road (opp Parkway Parade)
1	0	Walk to Parkway Parade
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76	130	
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Note: The waiting time to get on Bus 197 is now 5 min shorter

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### Scenario 2

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Source -- Singapore Expo.  
Destination -- Parliament House.

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#### Input 1:

Preference1 -- 100% Time, 0% Fare, Start Time 5.05pm

#### Output:

Optimal Trip: 43 minutes and cost \$2.50

#### Trip details:

1	0	Walk to Upper Changi Road East,
8	60	Take Bus 24 to Upper Changi Road (near TM MRT station)
2	0	Walk to Tanah Merah MRT station
20	130	Take MRT to City Hall MRT station
3	0	Walk to bus stop on North Bridge Road
4	60	Take Bus 174 to North Bridge Road (opp High St. Centre)
5	0	Walk Parliament House
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43	250	
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#### Input 2:

Preference2 -- Start Time 5.00pm

#### Output:

Optimal Trip: 41 minutes and cost \$2.50

#### Trip details:

1	0	Walk to Upper Changi Road East,
6	60	Take Bus 24 to Upper Changi Road (near TM MRT station)
2	0	Walk to Tanah Merah MRT station
21	130	Take MRT to City Hall MRT station
3	0	Walk to bus stop on North Bridge Road
3	60	Take Bus 166 to North Bridge Road (opp High St. Centre)
5	0	Walk Parliament House
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41	250	
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