



TKS Solutions

THE CHEAPEST FLIGHT PACKAGE

BROUGHT TO YOU BY
THOMAS, KWON, AND SMITH

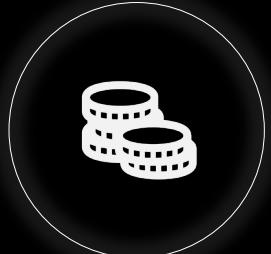


The Problem



Transportation

Being at the right place at the right time. Its not just an old saying..



Financial

It is no secret that flights can be expensive. As a business, traveling expenses can creep up on your financials.



Quality/Durability

Finding a solution that not only works, but will work consistently and is easy to use.



Cost

Competitive prices help you with the goal...making money.



Efficiency and Ease-of-Use

Our program is expertly designed to avoid slowing down your computer, and it is incredibly easy to use..just like riding a bike.

SOLUTION

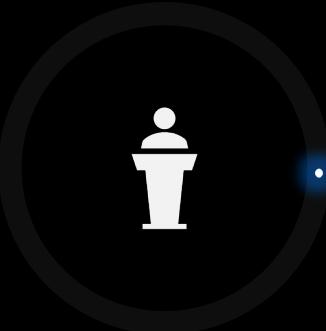
BUY OUR PROGRAM AND FOLLOW THESE STEPS TO SUCCESS

Installation is as simple as downloading a python file.

Install Program



Train User



Sleep well at night knowing you are saving money.



Efficiency

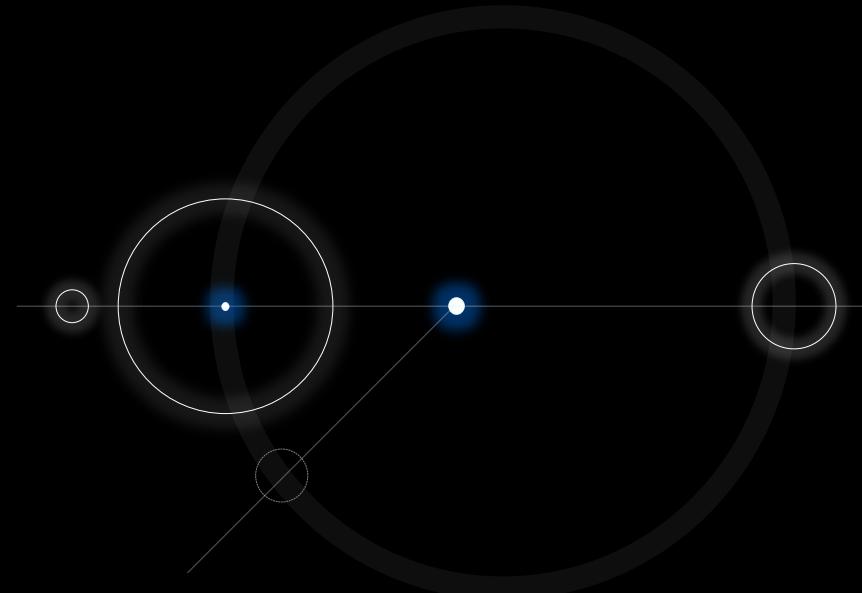
- Our program is technically designed to reduce computing time, keeping your computer running as it should

Ease of Use

- The user will need very basic knowledge of opening and closing Python and Anaconda files, but will require no coding knowledge
- Our program can be summarized in just 5 simple steps, as explained later
- While this knowledge may seem burdensome, it is a tremendous help to the user because...
 - Our program will record and output to the excel file as many trips as the user desires, making for easy comparison of travel options
 - The user can place the data for the flight fares anywhere in the spreadsheet as long as it begins in a column A-Z

Durability

- We claim that no user input error will crash our program as we will demonstrate later
- If for some reason, the user fails to enter in data correctly, they will be clearly directed by a prompt on the console



ABOUT US

We sought a product that is efficient, easy to use, and fool proof.

FUNCTIONING THE PROGRAM

DATA FORMATTING

- The data MUST be entered in the following manner
- Note the city names as columns headers and row labels
- An entry in a cell means there is a direct flight between the two cities at the specified cost
- Empty cells mean there is no direct flight between the two cities
- During installation, our team will save the directory of your excel file into the program. Refer to user manual if you change the directory path.



	Dallas	Houston	Austin
Dallas		55	40
Houston			35
Austin			
Corpus Christie			
San Antonio			
Lubbock			
El Paso			

```
12 loc='/Users/student/Desktop/ORSCM/Python Programming/ExcelFiles/TexasAirways.xlsx'
```

THE FIVE SIMPLE STEPS

The screenshot shows a Python 3.7.0 interactive shell and an IPython 7.8.0 notebook interface. A blue arrow points from the title 'THE FIVE SIMPLE STEPS' down to the green play button in the Python toolbar. Another blue arrow points from the title down to the starting cell for row labels in the IPython notebook.

```
Python 3.7.0 (default, Jun 28 2018, 07:39:16)
Type "copyright", "credits" or "license" for more information.

IPython 7.8.0 -- An enhanced Interactive Python.

In [1]: runfile('/Users/samuelsmith/Desktop/temp.py', wdir='/Users/samuelsmith/Desktop')
Starting cell for row labels:
```

	A	B
1		Ho
2	Dallas	
3	Houston	
4	Austin	

STEP ONE:

- OPEN THE FILE TITLED (TITLE) & CLICK THE GREEN PLAY BUTTON LOCATED AT THE TOP OF THE PYTHON FILE

STEP TWO:

- ENTER THE 1ST CELL OF THE ROW LABELS (E.G. A2 FROM THE TEXAS AIRWAYS EXAMPLE)

EXECUTING THE PROGRAM

In [10]:

```
In [10]: runfile('/Users/student/.spyder-py3/temp.py', wdir='/Users/  
student/.spyder-py3')
```

Starting cell for row labels:A2

```
Proceed with finding the distance and path? yes|
```

Starting cell for row labels:A2

```
Proceed with finding the distance and path? yes
```

```
starting destination,(insert space after comma) final destination Dallas, El Paso|
```

```
Unsatisfied with results and want to try again? yes|
```

```
Unsatisfied with results and want to try again? no|
```

STEP THREE:

TYPE IN YES WHEN PROMPTED WITH
QUESTION TO FINDING DISTANCE AND PATH

STEP FOUR:

ENTER STARTING CITY AND FINAL DESTINATION,
SEPARATED BY A COMMA AND A SPACE IN
BETWEEN

STEP FIVE

WHEN ASKED TO CONTINUE, ENTER YES TO
FIND ANOTHER LEAST-COST FLIGHT OR NO TO
STOP THE PROGRAM

EXCEL OUTPUT

AFTER YOU RUN THE PROGRAM, A HISTORY LOG OF THE LEAST COST FLIGHTS YOU ENTERED IS DISPLAYED TO THE EXCEL SPREADSHEET.

INFORMATION DISPLAYED:

STARTING FLIGHT IN COLUMN A

DESTINATION IN COLUMN B

TOTAL COST IN COLUMN C

SEQUENCE OF FLIGHTS IN COLUMN D

	A	B	C	D	E	
1		Dallas	Houston	Austin	Corpus Christie	San An
2	Dallas		55	40		
3	Houston			35		60
4	Austin					
5	Corpus Christie					
6	San Antonio					
7	Lubbock					
8	El Paso					
9						
10						
11	Starting flight	Destination	Total Cost	Sequence of flights		
12	Dallas	Houston	55	Dallas, Houston		
13	Corpus Christie	San Antonio	35	Corpus Christie, San Antonio		
14	San Antonio	Houston	65	San Antonio, Austin, Houston		
15						

Demonstrations

Outline of demonstrations

Phase 1

Basic Run Through



- Show the user how to function the program
- Explain the output in excel
- Show that it works correctly

Phase 2

Advanced Run Through

- Demonstrate Key features
- Key Features:
 - Will work for any location of the data in the spreadsheet
 - Output several results for comparison
 - Erases results each time you run the program
 - Show how it responds to changes in the number of cities

Phase 3

Try to Crash Program

- Run through scenarios in which it could possibly crash
- Demonstrate durability
- Show how easy it is to respond in various scenarios.



Competition Options

