

OpenTTD



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OpenTTD

- » Open source remake of Transport Tycoon
- » Multiplatform: runs on Windows, Linux, OS X, BSD, Solaris and other OSes
- » Licensed under GNU/GPL, written in C++
- » Project homepage is at <http://openttd.org>
- » Can be played for free thanks to open graphics and sound sets.



Gentbourne (8,392)

Sarrington (527)

Gentbourne

11th Feb 2047

-- kv/TC --

\$7,958,701,850

What I wanted to do

- » The goal of the game is to successfully run a fictive transport company, maximising the profit while satisfying the market
- » We need to construct new railways, stations, roads and other infrastructure, therefore gaining money is essential
- » We can look at our yearly expenses in a window but the data is not really arranged so well

ky/TC Finances (Company 1)			
<u>Expenditure/Income</u>	<u>2045</u>	<u>2046</u>	<u>2047</u>
Construction	-\$4,315,478	-\$9,988,032	
New Vehicles	-\$4,878,986		
Train Running Costs	-\$7,006,648	-\$7,226,334	-\$450,016
Road Vehicle Running Costs			
Aircraft Running Costs	-\$1,755,736	-\$1,702,554	-\$106,338
Ship Running Costs	-\$188,578	-\$192,344	-\$12,100
Property Maintenance	-\$724,040	-\$738,392	
Train Income	+\$296,685,532	+\$299,855,774	+\$21,914,284
Road Vehicle Income			
Aircraft Income	+\$20,755,768	+\$22,544,138	+\$2,005,408
Ship Income	+\$1,640,298	+\$1,656,762	
Loan Interest			
Other	-\$3,934	-\$477,514	
Total:	+\$300,208,198	+\$303,731,504	+\$23,351,238
Bank Balance	\$7,943,483,884		
Loan	\$0	Max Loan: \$4,000,000	
	\$7,943,483,884		
Borrow \$20,000		Repay \$20,000	Infrastructure

What I wanted to do

- » I set a goal to improve the overall readability of this window
- » I suggested the following possibilities:
 - reorder the data (group by vehicle type, ...)
 - separate the data with an empty space / line
 - differentiate incomes and expenses with color
 - use some icons

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Train Running Costs	-\$7,006,648	-\$7,226,334	-\$450,016
Road Vehicle Running Costs			
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Ship Running Costs	-\$188,578	-\$192,344	-\$12,100
Property Maintenance	-\$724,040	-\$738,392	
Train Income	+\$296,685,532	+\$299,855,774	+\$21,914,284
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ky/TC Finances (Company 1)

<u>Expenditure/Income</u>	<u>2045</u>	<u>2046</u>	<u>2047</u>
Construction	-\$4,315,478	-\$9,988,032	
New Vehicles	-\$4,878,986		
Train Running Costs	-\$7,006,648	-\$7,226,334	-\$434,380
Train Income	+\$296,685,532	+\$299,855,774	+\$22,359,714
Road Vehicle Running Costs			
Road Vehicle Income			
Aircraft Running Costs	-\$1,755,736	-\$1,702,554	-\$102,670
Aircraft Income	+\$20,755,768	+\$22,544,138	+\$2,005,408
Ship Running Costs	-\$188,578	-\$192,344	-\$11,644
Ship Income	+\$1,640,298	+\$1,656,762	+\$44,586
Property Maintenance	-\$724,040	-\$738,392	
Loan Interest			
Other	-\$3,934	-\$477,514	
Total:	+\$300,208,198	+\$303,731,504	+\$23,861,014
Bank Balance	\$7,943,993,660		
Loan	\$0	Max Loan: \$4,000,000	
	\$7,943,993,660		
Borrow \$20,000		Repay \$20,000	Infrastructure

Some notes

- » Those changes were made in a single .cpp file, namely `company_gui.cpp`
- » I had to
 - modify two lists defining the order of values to be printed
 - modify the behavior of two drawing functions
 - introduce the concept of making spaces between values :)

What I learned

- » While my changes work as planned, the separating space is a bit "hack-y"
- » In a project this size, even simple changes involve moderate responsibility
- » I started with this project too late and given the average response time of about two weeks, I didn't submit this as an official patch
- » The game really plays better, so I might still do so

An aerial view of a city simulation, likely from a game like SimCity. The city is densely packed with various buildings, roads, and green spaces. A semi-transparent dark grey overlay covers the entire scene. In the center, the text "Thanks for your attention" is written in a large, white, sans-serif font. There are several UI elements visible: a yellow label "Dennbury Central" on the left, a grey label "Dennbury" in the center, and a green label "Income: 155,644" with a "23%▲" indicator below it. A small number "289" is visible in the top right corner.

Thanks for your
attention