



Gridlock Buster

Team 5: Interns in
Training

Sherla, Anna, Brian,
Omar, Nora, Greg, Karson,
Alvin





More than 50%

of the combined total of fatal and injury
crashes occur at or near intersections.



A Brief History of Traffic Laws

from then to now



1800s

Public transport is common (horse drawn carriages, steam engine bus)



Jan 29
1886

First car is introduced in the US

May 21
1901

Connecticut creates the first set of traffic laws



1910s

Semaphores are used to regulate flow of vehicles

1912

Manually automated traffic switch is introduced



1917

Automated red/green light appears in San Francisco





1920s

Yellow light
makes its first
appearance

1920s

The use of cars is
growing
exponentially,
cheaper and
more accessible

Nov 20
1923

The three light
traffic light is
patented by
Garrett Morgan

1930s

More states
adopt the
introduction of
traffic laws an
speeding

1970s

Speeding laws
become more
strict as gas
prices increase

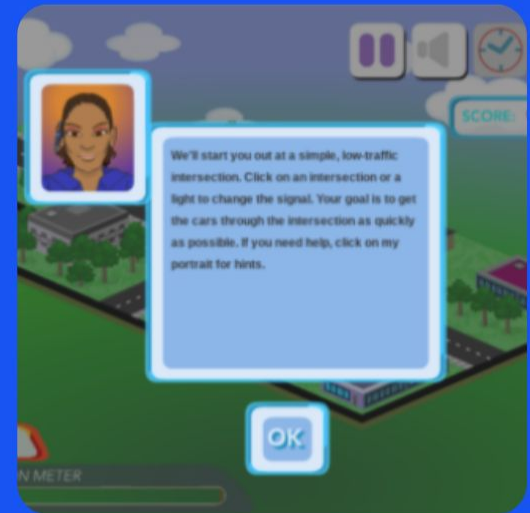
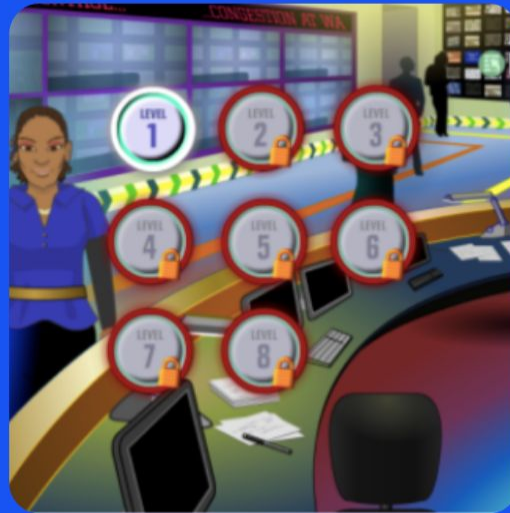
Now

Traffic is now a
part of every
Angelinos' daily
routine



Before Playing the Game

The exposition of Gridlock Buster



First Impressions

Gridlock Buster is an old but, well-developed game.

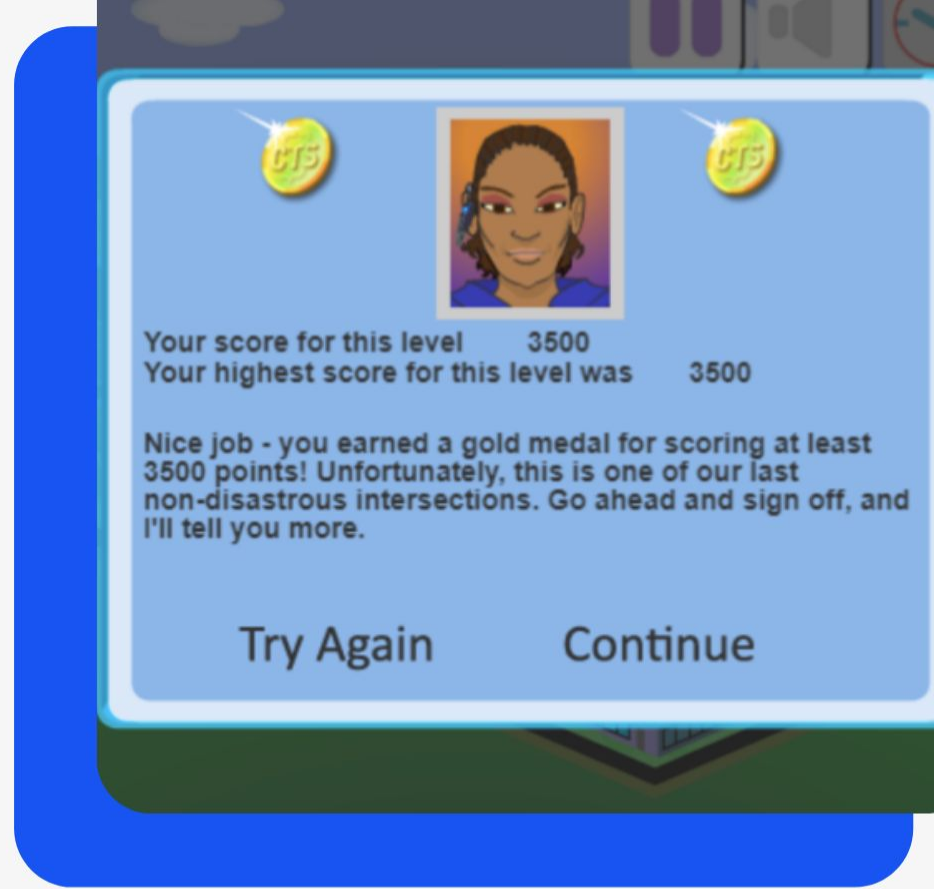
The art form is not crowded so that the user could see the main objective.

The atmosphere of the game is never negative.

- There is a main goal, and a secondary goal
 - Main goal is to pass the level. Secondary goal is to earn the gold medal.
- Both are encouraging

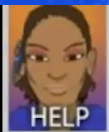


achieving the gold

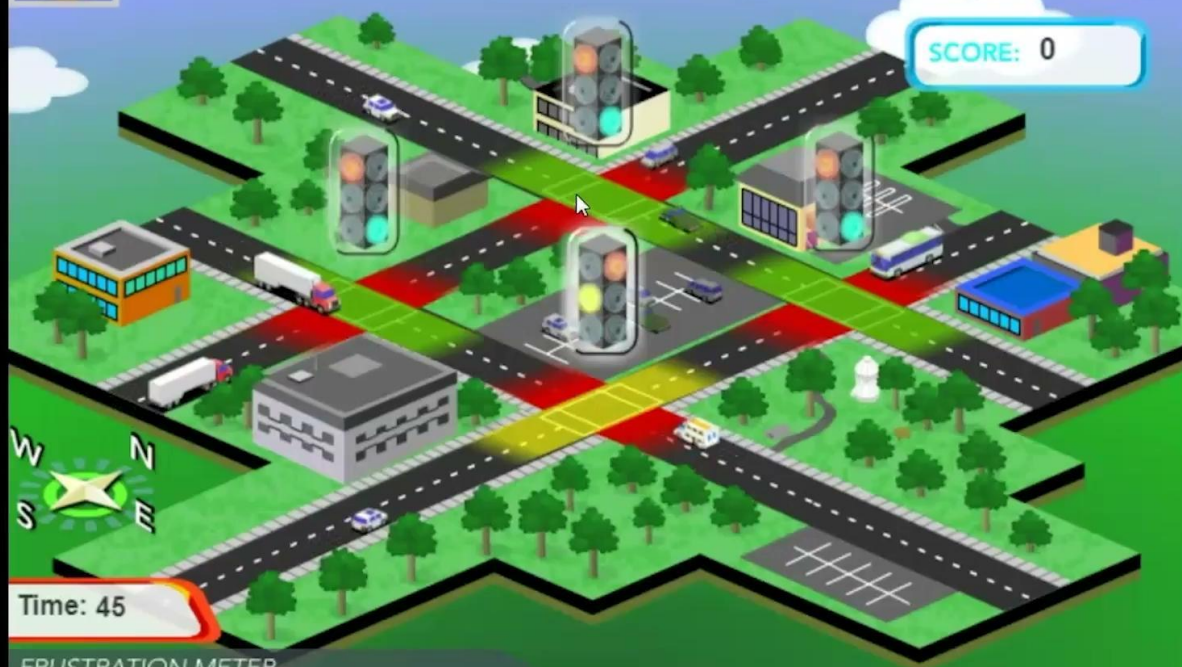


passing the level





SCORE: 0

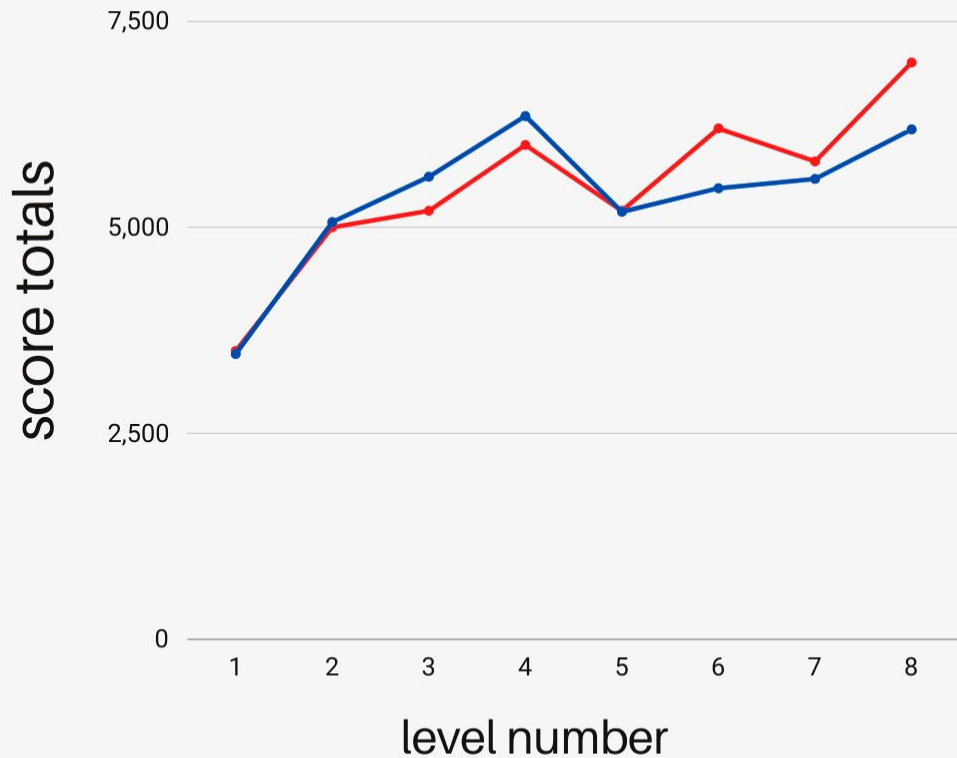


Time: 45

FRUSTRATION METER

RECORDED WITH
SCREENCAST





GAME STATISTICS

- Chart compares our avg scores to the required amount to get gold
- Gold is not necessary to pass the level



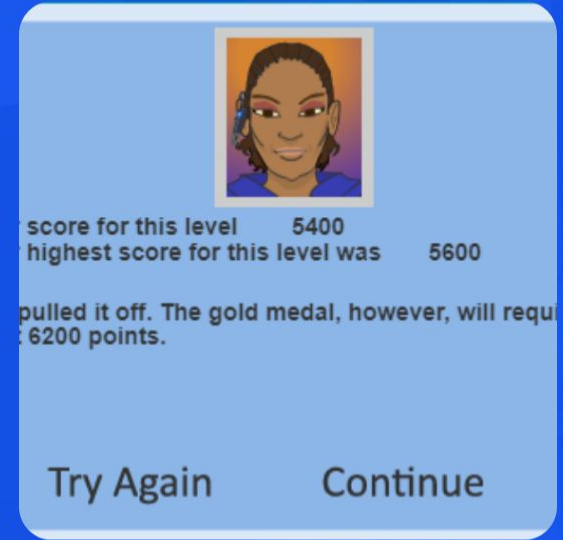
person	lvl 1	lvl 2	lvl 3	lvl 4	lvl 5	lvl 6	lvl 7	lvl 8
anna maria	3500	5000	5200	6000	5300	5400	5100	6200
alvin	3500	5100	6100	7000	5300	5500	5800	6400
greg	3300	5000	5400	6300	5100	5600	5700	6100
sherla	3500	5000	5400	6100	5200	5800	5900	6400
nora	3400	5100	5700	6700	5200	5400	5600	5900
Karson	3500	5100	5600	6500	5200	5400	5100	6000
brian m	3400	5200	5700	6100	4600	5300	5800	6500
Omar	3600	5000	5800	6100	5600	5400	5700	6000
Total:	27700	40500	44900	50800	41500	43800	44700	49500

lvl	min to get gold	avg	avg (rounded)
1	3500	3462.5	3463
2	5000	5062.5	5063
3	5200	5612.5	5613
4	6000	6350	6350
5	5200	5187.5	5188
6	6200	5475	5475
7	5800	5587.5	5588
8	7000	6187.5	6188

- Spreadsheet to organize all members scores
- Average values calculated from spreadsheet



Evidence Cont.



$$\frac{337400}{351200} = 96\%$$

Greg Valijan

“The game could apply solutions to both suburban and urban situations”

Sherla Chen

“This game is an easy mode version of what is reality for those working as traffic engineers.”

Anna Maria De La Torre

“The replayability of the levels along with the humor in the gameplay made the game enjoyable”

Alvin Zhao

“[The game] reminded me of old school 2D games”

Brian Mendoza

“Traffic engineers and transportation agencies must have it rough”

Karson Scott

Using “fixed-time control” to account for the traffic patterns helped to minimize the number of cars waiting at the light.”

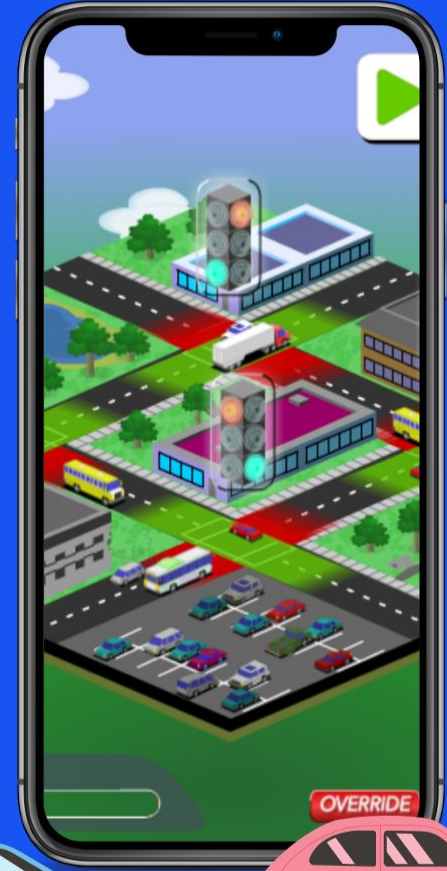
Nora Mirza

“I had no idea traffic engineers actually existed. It was something I never thought about.”



How Gridlock Buster Can Improve

- reduce length of descriptions
- add more concise language
- achieving gold on Level 8 was easier than Level 7
- game may prove to be discouraging as directions weren't clear
- open the avenue of mobile play



How Metro Can Improve

- bus linking, would reduce gaps and time lag in heavy traffic
- avoid placing bus stops at heavy intersections, keeps shoulder lane empty
- autonomous reliance for public transportation, reducing human error
- encourage sidewalk transport (bikes, scooters, etc.)



Overall Rating

7/10



Pros **educational and unique**

Cons **repetitiveness and lack of function**

Avg. **7,7,6,8,7,5,6,7**



Concluding Thoughts

- more difficult than first anticipated.
- increasingly harder past level 5
- switching lights based on time intervals
- limit amount of frustration of drivers
- displays difficulty of transportation experts' careers
- added appreciation for careers in the field
- would recommend others to play along



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Mr. Christian Gonzalez

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Questions?