Data Science 330 Final Project

Jonathan Jackson Program Utilized:Tableau

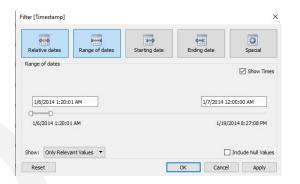
TASK DESCRIPTION

- Use the given data to help investigate the daily activities of the employees from a company from the city of Abila, Kronos
- Build visualization tools for movement data of specific employees from the company

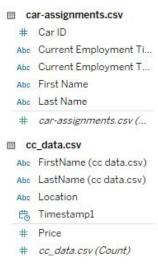


ABOUT THE DATA

- Not originally filtered through
- Gps data provides information on locations of each car
- Car-assignments provides information on which car belongs to which employee
- CC_data provides information on the location and timestamps of credit card transactions



LastName	FirstName	CarlD	CurrentEmploymentType	CurrentEmploymentTitle	
Alcazar	Lucas	1	Information Technology	IT Helpdesk	
Azada	Lars	2	Engineering	Engineer	
Balas	Felix	3	Engineering	Engineer	
Barranco	Ingrid	4	Executive	SVP/CFO	
Baza	Isak	5	Information Technology	IT Technician	
Bergen	Linnea	6	Information Technology	IT Group Manager	
Borrasca	Isande	7	Engineering	Drill Technician	
Calixto	Nils	8	Information Technology	IT Technician	
Calzas	Axel	9	Engineering	Drill Technician	





Common Daily Routine

Daily Routine

- Isolated GPS Data to track their individual routes on that weekday
- Used data points to track the location of 5 random employees on January 6
- Tracked the time of the routes the employees took



02

Anomalous but Benign

Employee Bertrand Ovan (#29) cruising around town on Jan. 11

- Used Car ID to locate the worker
- Filtered these locations by his name and date of Jan 11
- Found that #29 made a purchase at 8pm at Frydo's Autosupply, then went home
- #29 drove from 6:30pm midnight





Anomalous and Part of Plot

Executive Home Surveillance

- Filtered data by Car ID to locate employees #15, 16, 21, and 24
- Filtered data by date to include only January 6, 7, 9, 10, 11, 13, and 14
- Found that cars were switching surveillance shifts at approximately 3:30am on January 9 and January 11



CHALLENGES

- Geopositional data points don't match up with given image of Abila, Kronos (ex: Bean There Done That)
- Gps data displays locations not define on map (ex: Hippokampus)
- Truck drivers have no car ID and therefore cannot be tracked
- Sometimes timestamps of credit card purchases and geopositional locations of employees do not line up

