

Assignment 1: Database systems

EPPS 6354: Information Management

3 applications employing database systems

Application employing database system	Use of DBMS
Netflix	For storing TV shows and movies based on genre and various categories for users to access. User-specific consumption and analytics are considered as filters. Users can rate content, add it to their lists, or download it.
USAJOBS	For information about open job positions, including but not limited to location, type of position, starting pay, and government agency. Users can save job searches and employ various filters.
Plano Public Library	For information about different collections of materials which can be filtered based on format or field by users. Information concerning which items users have checked out and requested is also available.

3 applications in social/policy
science projects

Destination Database

Purpose

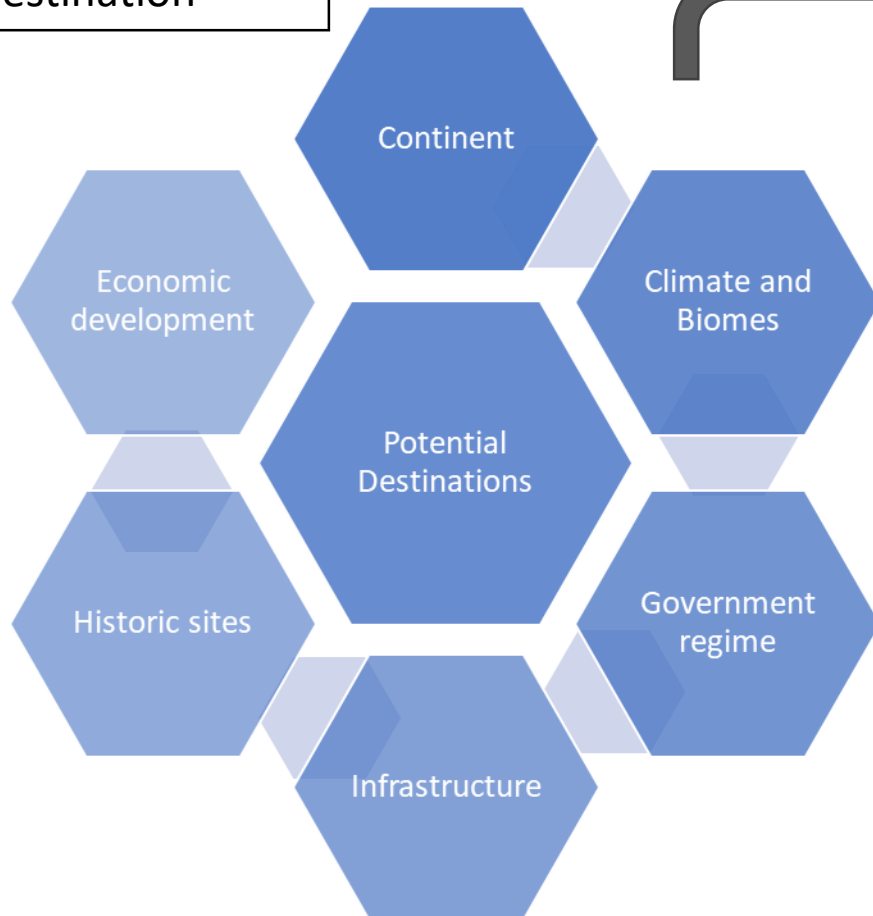
- To help users determine which destination to select for travel

Functions

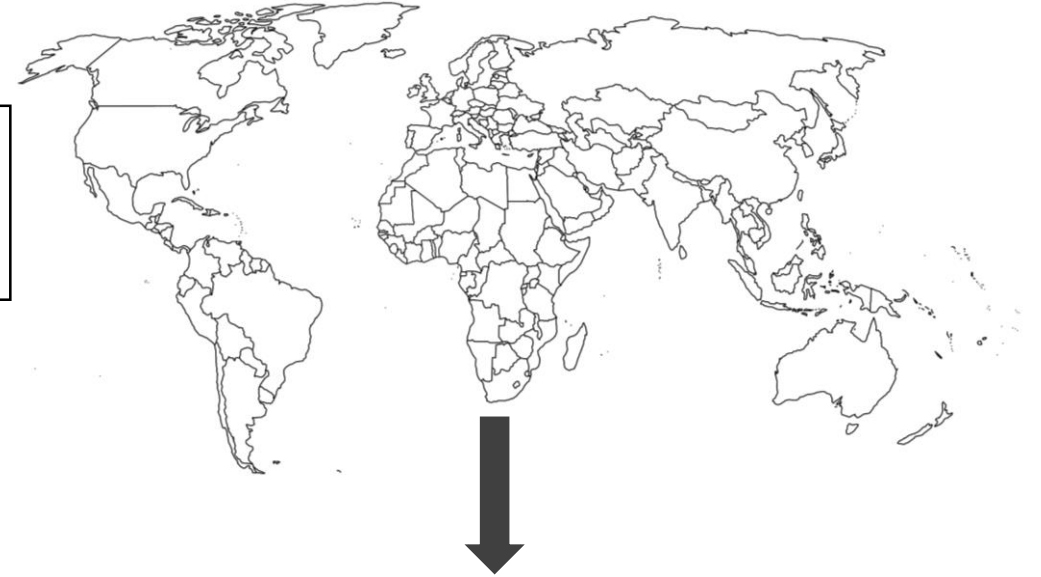
- Allows users to select various aspects they want to consider when determining their travel destination
- Additional information about countries is available
- Potential country attributes:
 - Government regime
 - Forms of transportation
 - Wildlife
 - LGBTQ rights
 - Terrorism

Simple interface design

App interface allows selection to determine destination



Map of relevant countries



Select country to view detailed information

Belgium

Currency: Euro

Languages:
French, German,
Dutch

Japan

Currency:
Japanese yen

Language:
Japanese

Brazil

Currency:
Brazilian real

Language:
Portuguese

Gardening Database

Purpose

- To help users determine which plants to select for their garden

Functions

- Allows users to select plants based on their location and other constraints
- Also allows users to receive thorough information concerning their desired plant type
- Potential attributes related to gardening:
 - Soil type
 - Fertilizer
 - Dormancy
 - Watering

Simple interface design

App interface allows users to choose which attributes they prefer



Choices include climate, biome, pests, weeds, cost, etc.

Plant type is either determined based on selections made by user, or selected plant type allows user to view all related gardening choices it requires

“On the Road” Statistics Database

Purpose

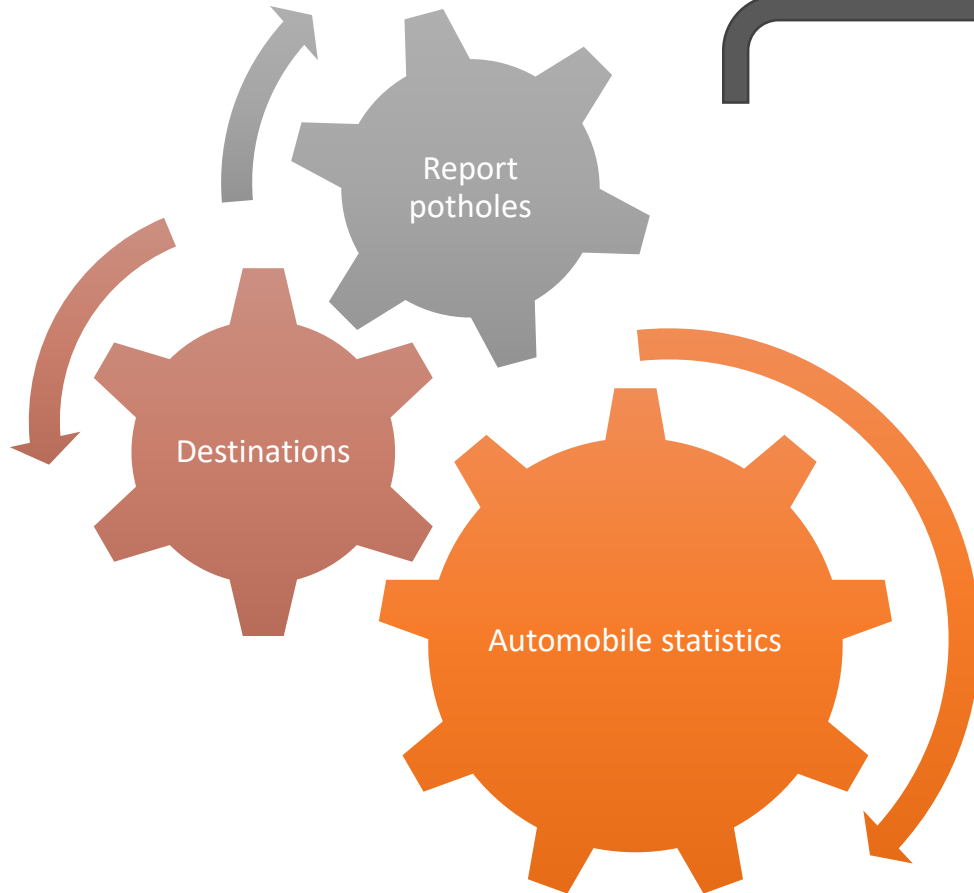
- To help users understand how they use their forms of transportation such as cars, motorcycles, etc.
- Also allows users to report potholes and be notified about potholes (e.g., location, lane, status, etc.)

Functions

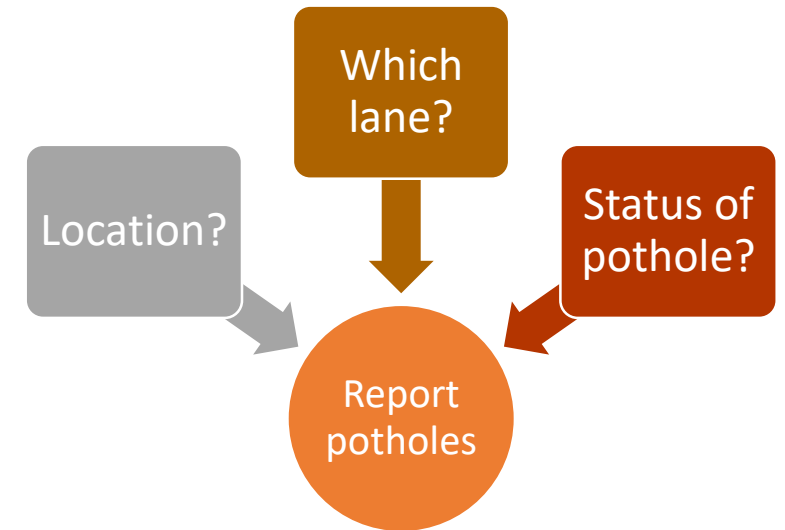
- Allows users to view statistics related to their transportation usage and become more self aware
- Integrate through CarPlay
- Potential attributes:
 - Report potholes
 - Gas usage
 - Travel distance
 - Locations visited
 - Time spent in traffic

Simple interface design

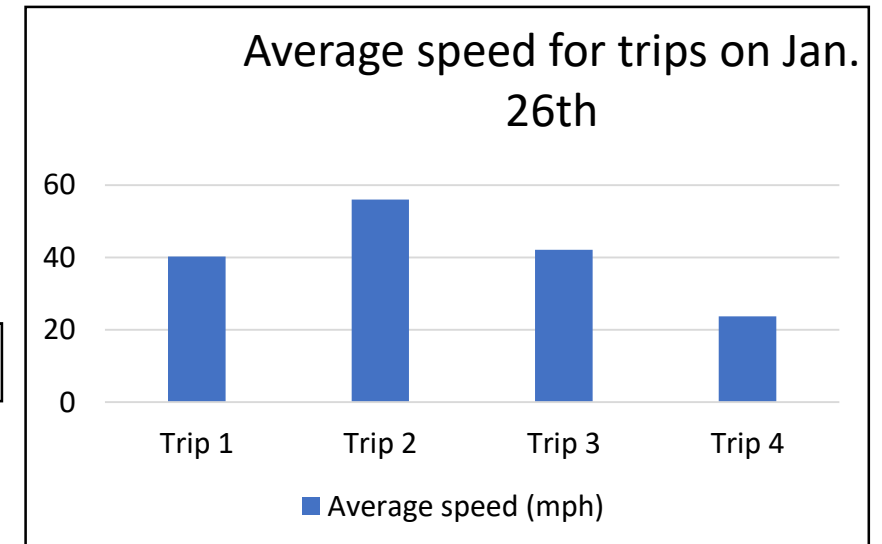
App interface allows users to choose which statistics to view



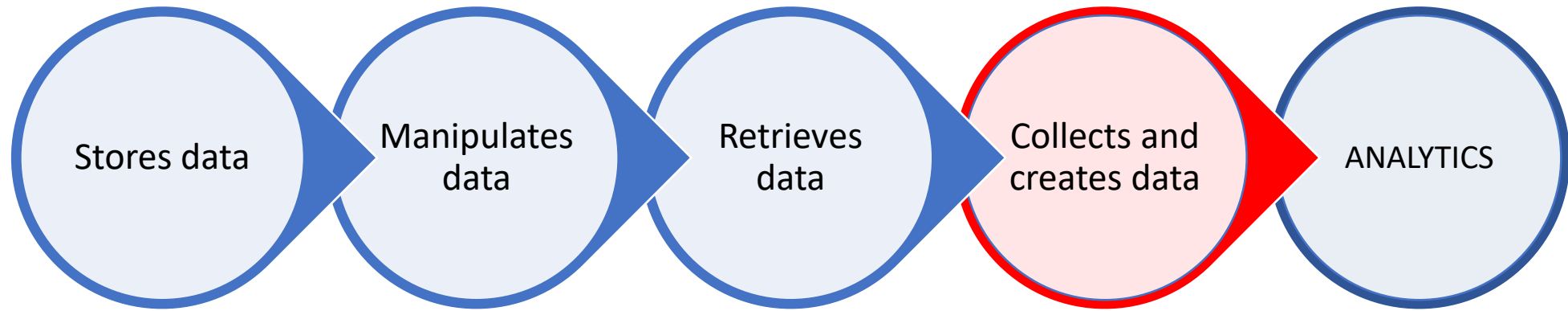
Users can access locations of reported potholes and notify local governments of existing potholes



Review statistics



Things current database systems cannot do?



- Collect and create data
 - How users interact with data?
 - Example: Which data receives high traffic?
 - Will support future analytic capabilities