# Conditions

<table>
<thead>
<tr>
<th>id</th>
<th>task</th>
<th>name</th>
<th>cond</th>
<th>S1</th>
<th>S2</th>
<th>S3</th>
<th>S4</th>
<th>S5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Training</td>
<td>Learning about the features of vehicles in this study</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td>2</td>
<td>Bullpen</td>
<td>Choose vehicles to consider</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>4</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>3</td>
<td>Casemap</td>
<td>Tell us about the features you desire</td>
<td>3</td>
<td>1</td>
<td>3</td>
<td>2</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td>4</td>
<td>TAB</td>
<td>Tell an agent how to buy a vehicle for you</td>
<td>4</td>
<td>1</td>
<td>3</td>
<td>4</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>5</td>
<td>Validation</td>
<td>Choose vehicles to consider (second set of vehicles)</td>
<td>5</td>
<td>1</td>
<td>4</td>
<td>2</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>6</td>
<td>Survey</td>
<td>Survey</td>
<td>6</td>
<td>1</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>6</td>
</tr>
</tbody>
</table>
Registration
WELCOME

Before we start, please make sure you are using Internet Explorer as your web browser for this study.

Please don't use any IE buttons (e.g., backward), only use the buttons designed in the study.

Qualification

- You need to be 18 years or older to participate the study.
- You need to be interested in owning a new car.
- You haven't participated in this study before.

What This Study is About

The study is designed to understand your preference for vehicles.

What You Need to Do In This Study

The study has two components:

1. You will come to a computer lab to complete some computer-based preference evaluations, which will take no more than one hour.
2. About one week after the above task, you will receive an email that will point you to a website to complete the second part of the study. You can do it from any computer with an internet connection. We expect that will take about half hour.

Your Compensation

Once all participants have completed the two study components:
Please Tell Us A Little About Yourself

1. Your gender: 

2. Your current status in school: 

3. Please select a word/phrase that Best Describes You: 

This study focused on vehicles you might be interested in purchasing. By vehicles we mean cars, SUVs, and crossover vehicles. The study is not about bicycles, scooters, or motorcycles.

4. Are you likely to purchase a vehicle in the next two years? 

5. If you were to purchase a new or used vehicle in the coming year, what would your budget be for that vehicle (if you don't want to purchase, put 0): $ ,000

6. How knowledgeable are you about vehicles that are available on the US market? 

7. Do you currently own a vehicle? Yes, I do.

Please tell us about your current vehicle:
- When (year) did you buy/receive this vehicle: 


Thank you for registration.

The time you registered is: S4. 14:00 - 15:00, Oct 5, 2009, Monday
The experiment will be in: 116 Business Building
Lab study
VEHICLE STUDY

WELCOME

Before we start, please make sure you are using Internet Explorer as your web browser for this study.

Please don’t use any IE buttons (e.g., backward), only use the buttons designed in the study.

LOGIN

Please login with your complete email address provided during the registration.

Complete Email Address

Password

Start The Study
GENERAL INSTRUCTIONS

What You Need to Do In This Study

The study has two parts:

1. You will finish the first part here today in the computer lab, which will take no more than one hour.

2. In about one week, you will receive an e-mail pointing you to a website to complete additional automobile evaluations. This second part should take no more than 30 minutes. You can complete the second part from any Internet-connected computer and can do so at your convenience.

You will receive compensation after completing the second part of the study.
GENERAL INSTRUCTIONS

Structure of Today's Study

1. Learning about the features of vehicles in this study
   This study is about your preferences for various features in vehicles (cars, SUVs). We begin by introducing you to these features. We then show you 9 vehicles and, for each vehicle, ask you whether or not you would consider buying that vehicle.

2. Tell an agent how to buy a vehicle for you
   We ask you to write a short e-mail to a "friend" who would act as your agent in buying vehicles for you.

3. Tell us about the features you prefer
   We ask you which features are (or are not) acceptable to you. Then, from among the acceptable features, we ask you to tell us how important these features are to your decision to consider a vehicle for potential purchase.

4. Choose vehicles to consider
   We show you 30 different vehicles and ask you whether or not you would consider buying each vehicle. You will also be asked to rank the vehicles you indicate you would consider.

5. Brief Survey
   You will complete a brief survey.
GENERAL INSTRUCTIONS

Vehicle Features

Vehicles have many different features; this study focuses on eleven major features. Assume that the vehicles do not vary on any features that are not explicitly stated and such features are similar to those typically found in modern automobiles and SUVs.

- We now describe the features. Drawings are not to scale and are only for illustrative purposes.

- We have indicated average incremental prices for various features. For example, Audi’s tend to be priced about $5,000 higher than brands such as Kia, Subaru and Ford; sports cars tend to be priced about $4,000 higher than compact sedans.

You may review these features at any time by clicking the "Vehicle Features" link in the upper right corner of the screen.
GENERAL INSTRUCTIONS

Vehicle Features

Brand
There are 20 brands.

- Audi $5,000
- BMW $7,000
- Buick
- Cadillac $5,000
- Chevrolet
- Chrysler
- Dodge
- Ford
- Honda
- Hyundai
- Jeep $1,000
- KIA
- Lexus $7,000
- Mazda
- Mini $1,000
- Nissan
- Scion
- Subaru
- Toyota $1,000
- Volkswagen $1,000
Vehicle Features

**Body type**
There are 7 body types for you to select from.
(Note that hatchback is non-sports car hatchback)

- **Sports Car**: $4,000
- **Hatchback**: $2,000
- **Compact Sedan**: $3,000
- **Crossover**: $4,000
- **Compact SUV**: $2,000
- **Mid-size SUV**: $3,000
- **Standard Sedan**: $3,000
Vehicle Features

**Price**
The price range is from **$16,000** to **$40,000**.
Vehicle Features

**Engine**
There are 2 types of engines: hybrid engine and gasoline engine.

- **Hybrid Engine**: combines a conventional engine with a rechargeable energy storage system (RESS) to achieve better fuel economy.
- **Gas Engine**: conventional internal-combustion engine using gasoline as fuel.

![Hybrid Engine]($6,000)

![Gas Engine]
Vehicle Features

EPA mileage
There are 5 levels of EPA mileage. The range is from 15 mpg to 35 mpg, where mpg = miles per gallon.
EPA stands for Environmental Protection Agency, who is responsible for providing fuel economy (gas mileage) data that is posted on the window stickers of new vehicles.

$15$ mpg  
$20$ mpg  
$25$ mpg  
$30$ mpg  
$35$ mpg

$750  
$1,500  
$2,250  
$3,000
GENERAL INSTRUCTIONS

**Vehicle Features**

**Quality of Workmanship Rating**
There are 3 levels of Quality of Workmanship Rating (Quality rating).
The Quality of Workmanship Rating refers to the quality of the finish and how well different parts fit together. The data is provided independently by [J.D. Power and Associates](https://www.jdpower.com) and is based on their Initial Quality Survey. Higher ratings are better.

- **Q3** level 3: 
  - $1,000
- **Q4** level 4: 
  - $2,000


[Next »]
GENERAL INSTRUCTIONS

Vehicle Features

Crash Test Rating
There are 3 levels of Crash Test Rating (Crash rating).
The Crash Test Rating refers to the star ratings that are assigned by the U.S. Government based on crash tests with actual vehicles. These star ratings indicate the chance of a serious injury to an occupant during a collision. Higher ratings are better.

- Crash 3: 21% to 35% chance of serious injury.
- Crash 4: 11% to 20% chance of serious injury.
- Crash 5: 10% or less chance of serious injury.

$500
$1,000
GENERAL INSTRUCTIONS

Vehicle Features

Transmission
There are 3 transmissions for you to select from.

- **Standard**: standard manual transmission
- **Automatic**: automatic transmission.
- **Shiftable automatic**: automatic transmission that can also be shifted manually

$750
Vehicle Features

Trim level
There are 3 trim levels for you to select from.

- **base trim**: includes cloth seats, basic instrumentation, basic sound systems, and basic interior lighting
- **upgraded trim**: includes some leather, better instrumentation, improved sound systems, and more interior lights.
- **premium trim**: includes leather seats, full instrumentation including navigation systems, premium sound systems, and a complete set of interior lights.

$1,500  $3,000
Vehicle Features

**Power package**

There are 2 power packages for you to select from.

- One has *normal seat* (without power), power window & lock
- The other has *power seat*, power window & lock

![Normal Seat](image1.png)

![Power Seat](image2.png)

$1,000
GENERAL INSTRUCTIONS

Vehicle Features

Glass package
There are 4 glass packages for you to select from.
("defogger" is short for "rear window defogger")
(cross means not having that feature, and check means having that feature)

- defogger
- sunroof

- defogger
- sunroof

$250

- defogger
- sunroof

$1,000

- defogger
- sunroof

$1,250
GENERAL INSTRUCTIONS

How You will be Compensated for Completing Both Parts of the Study

Guaranteed Compensation
EVERY participant who completes both parts of the study (today’s study and the study in one week) will receive $15. You will receive an email noticing you the location and time to receive this amount after you completed both parts of the study.

A Prize Based on Lottery

We will randomly select one participant from all participants who complete both parts of the study as a lottery winner. This lottery winner will receive $200 in cash for sure, and an opportunity of winning a vehicle (plus cash) worth $40,000. The particular vehicle you receive will be determined by your answers to any task in the study. In other words, if your answers tell us that you prefer vehicle A (price $x) to vehicle B (price $y) and if the available vehicles are A and B, you will receive vehicle A. The cash is the difference between the price of your preferred vehicle and $40,000, i.e., \((40,000-x)\).

Whether a lottery winner will win the vehicle is determined as follows. The lottery winner will be given 20 envelopes. Each envelope indicates a prize. Two envelopes indicate you are eligible to win a vehicle and the remainder indicate non-winning. If BOTH envelopes indicate you have won a vehicle (plus cash), then you will receive the vehicle. Otherwise you don’t receive the vehicle.

All your responses might directly affect the vehicle (plus cash) that you receive if you draw the winning envelopes. To determine that vehicle we will randomly select one task from one part of the study (either the tasks you complete here in the laboratory or the tasks you will complete in a week), examine your answers, and use your answers to select your vehicle. We will provide more details at the beginning of each task on how it will determine which vehicle you receive.

Remember, it is in your best interest to think carefully and respond to all tasks according to your personal preferences. If you win, then you get your preferred vehicle. Otherwise you might end up with something that you prefer less.

Please note that (1) the next to PSU does NOT have a lottery, they are at the bottom of a mountain near the vehicles. All tasks here are your only chance to win a vehicle.
This is the end of the General Introductions.
Please click the button below to start today's study.
Learning about the features of vehicles in this study

- In this task, you will see 9 different vehicles. For each vehicle, please indicate whether or not you would seriously consider purchasing this vehicle.

- By seriously consider we mean that you might visit a detailer, research the vehicle on the web, actively seek information from peers, etc. By indicating you seriously consider a vehicle, it means that you would be willing to purchase the vehicle if you most-preferred vehicle were unavailable.

- It is in your best interests to answer carefully to reflect your preferences among vehicles. For example, if you tell us you would consider a vehicle that you don't like, then that might be the vehicle you receive should you win the lottery. Similarly, if you tell us you would not consider something you actually like, then you may receive a less preferred vehicle should you win the lottery.
This is the end of "Learning about the features of vehicles in this study" Task. Please click the button below to start the next task.
Choose vehicles to consider

There are two steps in this task:

- **Step 1. Select Vehicles You Would Seriously Consider**
  You will see 30 vehicles in a random order. Please indicate which of these vehicles you *would seriously consider* for potential purchase. (Assume you are in the market to purchase a vehicle.)

- **Step 2. Rank the Vehicles Considered in Step 1**
  You will be shown all vehicles you have indicated that you would seriously consider, and your job is to rank order them based on your preference.

Recall that if you win the lottery and this task is randomly selected to determine the outcome, your answers to this task will determine the vehicle (plus cash) you receive. Basically, there are 20 different vehicles available as a prize, which have been randomly chosen prior to the study by a PSU staff who is not associated with this study. This list is secret for now, but will be made public after this study is completed. We will use your responses in this task to screen a subset of vehicles and identify the one you would like the most.

Remember, if the vehicle you receive worth, say, $x, you receive that vehicle plus $(40,000-x)$ in cash.
Step 1. Select Vehicles You Would Seriously Consider

You will see 30 vehicles in a random order. Please indicate which of these vehicles you would seriously consider for potential purchase. (Assume you are in the market to purchase a vehicle.)

By seriously consider we mean that you might visit a detailer, research the vehicle on the web, actively seek information from peers, etc. By indicating you seriously consider a vehicle, it means that you would be willing to purchase the vehicle if you most-preferred vehicle were unavailable.

There are a total of three panels on this screen:

- **Left Bar**: Icons represent vehicles. Click on an icon to evaluate a vehicle.
- **Center Panel**: Click the buttons at the bottom to indicate whether or not you would seriously consider this vehicle.
- **Right Panel**: This panel shows the vehicles you’ve indicated you will consider. It can also show the vehicles you’ve indicated you will not consider. It gives you the opportunity to change your mind about whether you would seriously consider a vehicle.

When you have evaluated all vehicles in the left bar, a new button (Next Step) will appear that allow you to move to the second step of the task where you will be asked to rank order the considered vehicles.
Step 2. Rank the Vehicles Considered in Step 1

We now ask you to rank the vehicles that you indicated you would seriously consider.

On the following screen your considered vehicle are shown in random order. The current rank (in random order) is shown in the upper left corner with 1 indicating highest rank. Please rearrange the vehicles to match your rank order by dragging vehicles to different positions. The rank-order numbers change automatically.

In some cases the random order will match your rank order, but in most cases it will not. As a check, if you make no changes we will ask you if that is your rank order.
VEHICLE STUDY

Ranking

1. Compact Sedan
   - Price: $33k
   - Gas Engine
   - 25 mpg
   - Premium
   - Automatic
   - Power Seat
   - X defogger
   - Sunroof

2. Crossover
   - Price: $33k
   - Gas Engine
   - 25 mpg
   - Premium
   - Automatic
   - Power Seat
   - X defogger
   - Sunroof

3. Mid-size SUV
   - Price: $31k
   - Gas Engine
   - 35 mpg
   - Premium
   - Automatic
   - Power Seat
   - X defogger
   - Sunroof

4. Crossover
   - Price: $34k
   - Gas Engine
   - 25 mpg
   - Premium
   - Automatic
   - Power Seat
   - X defogger
   - Sunroof

5. Hatchback
   - Price: $34k
   - Hybrid Engine
   - 35 mpg
   - Premium
   - Automatic
   - Power Seat
   - X defogger
   - Sunroof

6. Hatchback
   - Price: $30k
   - Hybrid Engine
   - 25 mpg
   - Premium
   - Automatic
   - Power Seat
   - X defogger
   - Sunroof
This is the end of "Choose vehicles to consider" Task.
Please click the button below to start the next task.
Tell us about the features you prefer

We now ask you to tell us directly about the features that your preferred vehicle should have.

You will do this in five easy steps:

- Step 1. Select "Unacceptable Feature Levels"
- Step 2. Select "Most Preferred" and "Least Preferred" Feature Levels
- Step 3. Select the "Critical Feature"
- Step 4. State "Importance" for Each Feature
- Step 5. State Preference for the Levels of Each Feature

Recall that if you win the lottery and this task is randomly selected to determine the outcome, your answers to this task will determine the vehicle (plus cash) you receive. Basically, there are 20 different vehicles available as a prize, which have been randomly chosen prior to the study by a PSU staff who is not associated with this study. This list is secret for now, but will be made public after this study is completed. We will use your responses in this task to screen a subset of vehicles and identify the one you would like the most.

Remember, if the vehicle you receive worth, say, $x, you receive that vehicle plus $\$(40,000-x)$ in cash.
Step 1. Select "Unacceptable Features Levels"

- Indicate which features levels, if any, are unacceptable to you by dragging and dropping them to the "Unacceptable Levels" box on the right.

- When you indicate a feature level in "unacceptable," you are excluding any vehicles from consideration if they have that feature level.

<table>
<thead>
<tr>
<th>Brand</th>
<th>Acceptable Levels</th>
<th>Unacceptable Levels</th>
</tr>
</thead>
<tbody>
<tr>
<td>Audi</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BMW</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Buick</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cadillac</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chrysler</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dodge</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ford</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chevrolet</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hyundai</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jeep</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kia</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lexus</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mazda</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mini</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nissan</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scion</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Subaru</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Toyota</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Volkswagen</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**Step 2. Select "Most Preferred" and "Least Preferred" Feature Levels**

- Indicate your "Most Preferred" and your "Least Preferred" (but still acceptable) levels for each feature by dragging and dropping the level to the target box.

<table>
<thead>
<tr>
<th>Brand</th>
<th>Acceptable Feature Levels</th>
<th>Least Preferred</th>
<th>Most Preferred</th>
</tr>
</thead>
<tbody>
<tr>
<td>Audi</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BMW</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Buick</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ford</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Body type</th>
<th>Acceptable Feature Levels</th>
<th>Least Preferred</th>
<th>Most Preferred</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hatchback</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Standard Sedan</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Compact SUV</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mid-size SUV</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Engine</th>
<th>Acceptable Feature Levels</th>
<th>Least Preferred</th>
<th>Most Preferred</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hybrid Engine</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gas Engine</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Transmission</th>
<th>Acceptable Feature Levels</th>
<th>Least Preferred</th>
<th>Most Preferred</th>
</tr>
</thead>
</table>
Step 3. Select the "Critical Feature"

- Compare the features and select the "Critical Feature".
- The "Critical Feature" is the feature for which the improvement from the least preferred but acceptable level to the most preferred level is the most valuable to you.

<table>
<thead>
<tr>
<th>Feature</th>
<th>Least Preferred Level</th>
<th>Most Preferred Level</th>
<th>Critical Feature</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brand</td>
<td>Ford</td>
<td>BMW</td>
<td>○</td>
</tr>
<tr>
<td>Body type</td>
<td>Hatchback</td>
<td>Mid-size SUV</td>
<td>○</td>
</tr>
<tr>
<td>Price</td>
<td>$34K</td>
<td>$22K</td>
<td>○</td>
</tr>
<tr>
<td>Engine</td>
<td>Hybrid Engine</td>
<td>Gas Engine</td>
<td>○</td>
</tr>
<tr>
<td>EPA mileage</td>
<td>25 mpg</td>
<td>35 mpg</td>
<td>○</td>
</tr>
<tr>
<td>Quality of Workmanship Rating</td>
<td>Quality 4</td>
<td>Quality 5</td>
<td>○</td>
</tr>
<tr>
<td>Crash Test Rating</td>
<td>Crash rate 4</td>
<td>Crash rate 5</td>
<td>○</td>
</tr>
<tr>
<td>Transmission</td>
<td>automatic</td>
<td>shiftable automatic</td>
<td>○</td>
</tr>
<tr>
<td>Trim level</td>
<td>upgrade</td>
<td>premium</td>
<td>○</td>
</tr>
<tr>
<td>Power package</td>
<td>Normal Seat</td>
<td>Power Seat</td>
<td>○</td>
</tr>
<tr>
<td>Glass package</td>
<td>defogger</td>
<td>defogger and sunroof</td>
<td>○</td>
</tr>
</tbody>
</table>
Step 4. State "Importance" for Each Feature

- By "importance," we mean the importance of the improvement from the least preferred, but acceptable, level to the most preferred level of a given feature.

- Rate the relative importance of each feature as compared to the feature you most prefer (critical feature). The feature you most prefer is given 10 points. All other features should be given a rating between 0 and 10.

<table>
<thead>
<tr>
<th>Feature</th>
<th>Least Preferred Level</th>
<th>Most Preferred Level</th>
<th>Importance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brand</td>
<td>Ford</td>
<td>BMW</td>
<td>10 (critical feature)</td>
</tr>
<tr>
<td>Body type</td>
<td>Hatchback</td>
<td>Mid-size SUV</td>
<td></td>
</tr>
<tr>
<td>Price</td>
<td>$34K</td>
<td>$22K</td>
<td></td>
</tr>
<tr>
<td>Engine</td>
<td>Hybrid Engine</td>
<td>Gas Engine</td>
<td></td>
</tr>
<tr>
<td>EPA mileage</td>
<td>25 mpg</td>
<td>35 mpg</td>
<td></td>
</tr>
<tr>
<td>Quality of Workmanship Rating</td>
<td>Quality 4</td>
<td>Quality 5</td>
<td></td>
</tr>
<tr>
<td>Crash Test Rating</td>
<td>Crash rate 4</td>
<td>Crash rate 5</td>
<td></td>
</tr>
<tr>
<td>Transmission</td>
<td>automatic</td>
<td>shiftable automatic</td>
<td></td>
</tr>
<tr>
<td>Trim level</td>
<td>upgrade</td>
<td>premium</td>
<td></td>
</tr>
<tr>
<td>Power package</td>
<td>Normal Seat</td>
<td>Power Seat</td>
<td></td>
</tr>
<tr>
<td>Glass package</td>
<td>defogger</td>
<td>defogger and sunroof</td>
<td></td>
</tr>
</tbody>
</table>
Step 5. State Preference for the Levels of Each Feature

- If the most preferred level of each feature is a "10" and the least preferred level is a "0", you are asked to assign a number between 0 and 10 to every other acceptable level of that feature.

<table>
<thead>
<tr>
<th>Brand</th>
<th>Feature Levels</th>
<th>Preference</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>BMW</td>
<td>10 (most preferred)</td>
</tr>
<tr>
<td></td>
<td>Audi</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Buick</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Ford</td>
<td>0 (least preferred)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Body type</th>
<th>Feature Levels</th>
<th>Preference</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mid-size SUV</td>
<td>10 (most preferred)</td>
</tr>
<tr>
<td></td>
<td>Standard Sedan</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Compact SUV</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Hatchback</td>
<td>0 (least preferred)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Price</th>
<th>Feature Levels</th>
<th>Preference</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$22K</td>
<td>10 (most preferred)</td>
</tr>
<tr>
<td></td>
<td>$28K</td>
<td></td>
</tr>
<tr>
<td></td>
<td>$34K</td>
<td>0 (least preferred)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>EPA mileage</th>
<th>Feature Levels</th>
<th>Preference</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
This is the end of "Tell us about the features you prefer" Task.
Please click the button below to start the next task.
**Intro**

**Tell an agent how to buy a vehicle for you**

- For this task, you are to provide instructions to agents (your fellow students) through an email. These instructions will tell these agents how to select a vehicle for you. If you win the lottery (and this task determines which vehicle you win), these agents will actually make the selection for you from the set of available vehicles.

- **Here is how it works.** Two fellow students (agents) will independently evaluate your buying instructions and choose a vehicle (plus cash) for you.
  - If your instructions do not narrow the list of vehicles, they will use their judgment based on your overall instructions.
  - If the two agents select different vehicles, a third agent will choose one of the two selections.
  - We will hire two agents who do not know anything about this study and whose job is to identify the vehicle from the available vehicle set that they believe you will prefer the most, based on the instructions you give them. The agents' decisions will be audited. They will not receive their payment if we determine that they ignored or misinterpreted you instructions.

- Please write this e-mail very carefully. Recall that if you win the lottery and this task is randomly selected to determine the outcome, your answers to this task will determine the vehicle (plus cash) you receive. Basically, there are 20 different vehicles available as a prize, which have been randomly chosen prior to the study by a PSU staff who is not associated with this study. This list is secret for now, but will be made public after this study is completed. We will use your responses in this task to screen a subset of vehicles and identify the one you would like the most.

- Remember, if the agent chooses a vehicle worth, say, \$x, you receive that vehicle plus \$(40,000-x) in cash.
Tell an agent how to buy a vehicle for you

Hints:

- State as many instructions as possible so that the agents have the best information on your preferences.

- Instructions should be unambiguous and easy to follow.

- Use paragraphs if that helps.

- If there are vehicles you would not consider (or you must have), describe those vehicles so that the agent can make decisions for you.

- Help the agent make tradeoffs. For example, if there is a choice between a better trim package or better fuel economy, all else equal, tell the agent how to decide.

- If "it depends," tell the agent. For example, you might like one body style with one manufacturer and another body style with another manufacturer. Or you might like a brand, but only in some body styles or trim levels.

- When a vehicle has more features, it's price is usually higher. For example, a power seat can add $1,000 to the price of a vehicle. If you would like a feature, such as a power seat, but there is a limit on how much you want to pay for that feature, tell the agent.

- Click on "features" in the upper right corner to review average feature-based prices. Some brands and body types also add to the price of a vehicle.
Tell an agent how to buy a vehicle for you

- Please write the email in paragraphs.
- Please make sure, you provide enough information, make yourself clearly understood.
- Please focus only on the Vehicle Features in this study. The vehicles will vary on these features only (to be greatest extent feasible). To review the features click "Vehicle Features" in the upper right corner.
- You may want to think back to the first task in this study where you told us which of nine vehicles you would consider.
- You can also use the left and center panels to help come up with instructions. If you click on a vehicle, the complete configuration will be shown in the center panel. (You can generate more examples by clicking "more examples.")

Examples:

My Email:

Dear friend,
Tell an agent how to buy a vehicle for you

Below is the email you just wrote. Please check to make sure:

- You provide enough information, make yourself clearly understood.
- You focus only on the Vehicle Features in this study. The vehicles will vary on these features only (to be greatest extent feasible).

Dear friend,

My preferred shape for a new car is a sportscar; however I am also very interested in compact SUV’s and would be happy with any of these. I prefer an American car, although I do like BMW’s. Ford is my absolute second choice next to a BMW. I am open to any type of price, although I don’t find a 40,000 car necessary for me. I would be happy with a car that is mid-range in price ($25,000-$30,000).

For the engine – I do not require a hybrid engine. I prefer a gas engine. I would like my car to get at least 25 mpg. For quality and safety, I prefer levels of 4 for each.

I only wish to have automatic or shiftable automatic transmissions. I prefer upgraded trim but do not require premium trim.

One thing that is very important is having power seating that has power locks and windows. I do not want normal seats or non-power windows and locks.

Lastly, a defogger is absolutely necessary for me, but I do not require a sunroof.
This is the end of "Tell an agent how to buy a vehicle for you" task. Please click the button below to start the next task.
Brief Survey

- Finally, we would like to ask you a few questions that will help us better understand you and your preferences. You will also be given the opportunity to comment on this study.

- Please click the button below to start.
1. Do you currently own a vehicle? Yes, I do.

Please tell us about your current vehicle:

<table>
<thead>
<tr>
<th>Brand</th>
<th>Body type</th>
<th>Engine</th>
<th>EPA mileage</th>
<th>Quality of Workmanship Rating</th>
<th>Crash Test Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Transmission    | Trim level | Power package | Glass package
|-----------------|------------|---------------|-----------------|

What was the price of your current vehicle when bought (approximate. if you don’t know or can’t remember, put 0): $__,000

When (year) did you buy/receive this vehicle: __________

When (year) did this model launched (approximate): __________

2. Tell us about your ideal vehicle (a vehicle with your most preferred combination of features)?
This is the end of Survey.
Please click the button below to finish today's study.
Delayed Task
VEHICLE STUDY

WELCOME BACK

This is the 2nd part of the vehicle study you have signed up for. You can do it on any computer with internet connection.

Here are two rules that you need to pay special attention to:

1. Please make sure you are using Internet Explorer as your web browser for this study.

2. Please don’t use any IE buttons (e.g., backward), only use the buttons designed in the study.

LOGIN

Please login with your complete email address provided during the registration.

Complete Email Address

If you have any problem with login, please write to me (Min Ding, minding@psu.edu) and copy my doctoral student (Songting Dong dongst@gmail.com).

Start The Study
GENERAL INSTRUCTIONS

You have finished the first part of the study in the lab. This is the second part of the study. It might take about 20 minutes.

Structure of Today's Study

- **Choose vehicles to consider**
  We show you 30 different vehicles and ask you whether or not you would consider buying each vehicle. You will also be asked to rank the vehicles you indicate you would consider.
  This task is the same as the "Choose vehicles to consider" in the lab study, except that we choose another set of 30 profiles for you to consider.
GENERAL INSTRUCTIONS

After completing today’s study, you will receive an email in one week, telling you when and where to pick up your compensation.

How You will be Compensated

Guaranteed Compensation
EVERY participant who completes both parts of the study (today’s study and the study last week) will receive $15. You will receive an email noticing you the location and time to receive this amount after you completed both parts of the study.

A Prize Based on Lottery

We will randomly select one participant from all participants who complete both parts of the study as a lottery winner. This lottery winner will receive $200 in cash for sure, and an opportunity of winning a vehicle (plus cash) worth $40,000. The particular vehicle you receive will be determined by your answers to any task in the study. In other words, if your answers tell us that you prefer vehicle A (price $x) to vehicle B (price $y) and if the available vehicles are A and B, you will receive vehicle A. The cash is the difference between the price of your preferred vehicle and $40,000, i.e., $(40,000-x).

Whether a lottery winner will win the vehicle is determined as follows. The lottery winner will be given 20 envelopes. Each envelope indicates a prize. Two envelopes indicate you are eligible to win a vehicle and the remainder indicate non-winning. If BOTH envelopes indicate you have won a vehicle (plus cash), then you will receive the vehicle. Otherwise you don’t receive the vehicle.

All your responses might directly affect the vehicle (plus cash) that you receive if you draw the winning envelopes. To determine that vehicle we will randomly select one task from one part of the study, examine your answers, and use your answers to select your vehicle. We will provide more details at the beginning of each task on how it will determine which vehicle you receive.

Remember, it is in your best interest to think carefully and respond to all tasks according to your personal preferences. If you win, then you get your preferred vehicle. Otherwise you might end up with something that you prefer less.
Choose vehicles to consider

We have picked a different set of 30 vehicles for you to choose from.

There are two steps in this task:

- **Step 1. Select Vehicles You Would Seriously Consider**
  You will see 30 vehicles in a random order. Please indicate which of these vehicles you **would seriously consider** for potential purchase. (Assume you are in the market to purchase a vehicle.)

- **Step 2. Rank the Vehicles Considered in Step 1**
  You will be shown all vehicles you have indicated that you would seriously consider, and your job is to rank order them based on your preference.

Recall that if you win the lottery and this task is randomly selected to determine the outcome, your answers to this task will determine the vehicle (plus cash) you receive. Basically, there are 20 different vehicles available as a prize, which have been randomly chosen prior to the study by a PSU staff who is not associated with this study. This list is secret for now, but will be made public after this study is completed. We will use your responses in this task to screen a subset of vehicles and identify the one you would like the most.

Remember, if the vehicle you receive worth, say, $x$, you receive that vehicle plus $(40,000-x)$ in cash.
Step 1. Select Vehicles You Would Seriously Consider

You will see 30 vehicles in a random order. Please indicate which of these vehicles you would seriously consider for potential purchase. (Assume you are in the market to purchase a vehicle.)

By seriously consider we mean that you might visit a detailer, research the vehicle on the web, actively seek information from peers, etc. By indicating you seriously consider a vehicle, it means that you would be willing to purchase the vehicle if you most-preferred vehicle were unavailable.

There are a total of three panels on this screen:

- **Left Bar:** Icons represent vehicles. Click on an icon to evaluate a vehicle.
- **Center Panel:** Click the buttons at the bottom to indicate whether or not you would seriously consider this vehicle.
- **Right Panel:** This panel shows the vehicles you've indicated you will consider. It can also show the vehicles you've indicated you will not consider. It gives you the opportunity to change your mind about whether you would seriously consider a vehicle.

When you have evaluated all vehicles in the left bar, a new button (Next Step) will appear that allow you to move to the second step of the task where you will be asked to rank order the considered vehicles.
Step 2. Rank the Vehicles Considered in Step 1

We now ask you to rank the vehicles that you indicated you would seriously consider.

On the following screen your considered vehicle are shown in random order. The current rank (in random order) is shown in the upper left corner with 1 indicating highest rank. Please rearrange the vehicles to match your rank order by dragging vehicles to different positions. The rank-order numbers change automatically.

In some cases the random order will match your rank order, but in most cases it will not. As a check, if you make no changes we will ask you if that is your rank order.

Start
This is the end of "Choose vehicles to consider" Task. Please click the button below to finish today's study.
This is the end of the study. Thank you again for participating. You will receive an email in one week, telling you when and where to pick up your compensation. Click the button below to exit.