# Final Project: Integrating Your Knowledge

## Using the Word, Internet Searching and HTML Together

**Due: 01 or 02 June 2003, in your LAST class**

## Project Task

Your job is to learn about and compare 4 new **sports cars**. You must do the following:

1. **Find** basic data and information on the Web about each vehicle.
2. **Organize** and **analyze** the data that you gather with a spreadsheet.
3. **Answer** basic questions from your spreadsheet, and **report** your conclusions with a Word document.
4. **Present** what you find out about the vehicles in a PowerPoint slide show.
5. **Summarise** your findings on the vehicles in an HTML document, providing links to all three of your other documents.

## Step One – Finding Basic Data:

For all 4 vehicles, find and record as many of the following specifications as you can. When you find useful data, **record** both the **data and** the **address of the Web page** that you use in your **list of references**.

**Engine**

Number of cylinders and configuration (V8, In-line 4, etc.)
Size (Displacement) in cubic centimeters
Horsepower Produced

**Steering**

Type
Turning circle, in ft.

**Brakes**

Type in front (disk or drum)
Type in rear (disk or drum)
Stopping distance, from 100 kph to 0 kph

**Body**

Ground clearance
Wheelbase
Distance between front wheels (Front track)
Distance between rear wheels (Rear track)

Overall length
Overall width
Overall height

Total weight, without passengers (Curb weight)

**Safety Features**

Number and type of air bags (Driver, passenger, front, side)
Special reinforcements to body?
Other safety features

**Fuel**

Fuel tank capacity (in liters)
Fuel economy, in Km per liter (Km/l)

**Performance**

Acceleration, from 0 to 100 km/h, in seconds
Top speed

**Price**

Base price, without options

**Sales**

Total sales of this vehicle, around the world

**Remember:** Record where you find your data in your **list of references** – the Web address is VERY important.

## Step Two – Creating Your Spreadsheet:

First, organize the data for all 4 vehicles into a clear, simple spreadsheet.

Next, use the spreadsheet to analyze and compare all numeric data for your vehicles. Calculate **maximums, minimums, means,** and **ranges** for all data **where these calculations make sense**.

**Use your calculations to analyze the similarities and differences between the vehicles.**

If you can do other useful calculations that help to compare the 4 vehicles, you will receive a higher mark. Be sure that all data are clearly labeled, so that a person who is not familiar with the subject may understand your spreadsheet.

Create at least **4 charts** with your data. Each chart must give the reader **useful** information.

## Step Three – Writing About What You Learn:

Use MS Word to write a summary of what you learn from your spreadsheet. With information from your spreadsheet, answer any **seven or more** of the questions below. These questions require you to make conclusions. So, when you answer each question, you must **explain** your conclusion with data (**evidence**) from your spreadsheet. For this reason, you should copy Excel data or charts (or both) into your report as proof that supports your answer.

- Which car is "best" on a straight highway? Why?
- Which car is "best" on a curving highway? Why?
- Which car will roll over first at high speed in a curve? Why?
- Which car will stop the fastest? How do you know?
- Which car is "best" in crowded areas with poor parking? Why?
- Which car creates the most air pollution? Why?
- Which car can go the greatest distance on one tank of fuel? Why?
- Which car is most popular?
- Which car is the best value for the price? Why?
- Which car is "best" overall? Which would you want to own most? Why?

## Step Four – Presenting What You Learn in PowerPoint:

Lastly, use the report you have written to create a PowerPoint slide show. Use the most important ideas to make a slide show of at least 10 slides, including the title slide.

You should paste data and charts from your spreadsheet into the slide show, just as you did in your report, to help support your ideas.

You may insert up to 4 extra photos or graphics from the Web to improve the appearance of your presentation. However, the pictures must help to present your message.

## Step Five – Summarise your findings in an HTML document:

Now you have to create an HTML document that provides a summary of the information you have found. In this you will explain what was required of you for your project, the four vehicles you researched and the one you regarded best of the four, giving brief reasons why. You should also provide links to your other 3 documents, along with photos of your vehicles along with links to some of the sites you used to research the vehicles.

## Summary: What is Required

On your last day of class -- **June 01 or 02** -- Ensure that the following materials are in a folder and copy it into the class folder in work finished.:

- Your **report,** produced using MS Word. Your report must include:
  - The project **title page** which you created in class, and
  - A **list** of your **references** -- all the **Web pages** where you found data
- Your **Excel spreadsheet**.
- Your PowerPoint **slide show**, with **4 slides per page**.
- Your HTML document along with the photographs you are use in the document.

## Final Points

This is your last chance to show your teacher what you have learned. Do your **best** work – and do your **own** work!

Projects turned in **late** will lose 10% per day