TECHNO Kids

Senior Projects

Contents

Subject: **TECHNO**Kids	Grade: 10-12
Course: Senior	
Project: TECHNOPlanner 2013	Code: C986G0UU07L00 - C986G0UU07L07

Project Overview

Introduction to **TECHNO**Planner

In this project, students become event planners. They own a company that plans special occasions such as weddings, birthday parties, reunions, or proms. They must create a database to help them organize client and event information. This database will help students offer top quality service to their customers, since no detail will be forgotten.

Students complete the following tasks:

- **C986G0UU07L01-** In session 1, students use Microsoft Access to study the TechnoPlanner database. It organizes customer and event information for an event planning company. Students study objects such as a table, form, query, and report to gain an understanding of the purpose and structure of a database.

- **C986G0UU07L02-** In session 2, students become event planners. To make business operations run smoothly they begin construction of a database to store customer and event details. Students complete a planning sheet to organize the content of their database. Afterwards, they create the Customers table by adding the fields and setting the field properties. Next, students use their skills to build the Events table. Upon completion, students create a relationship between the tables to allow the event planner to connect customers to their booked events.

- **C986G0UU07L03-** In session 3, students produce forms that allow for easy data entry. To begin, they create a Customers form using the Form Wizard. The layout of the form is modified to create a customized design. Afterwards an Events form is made in Design View. Upon completion, the forms are combined so that when a customer record is displayed, any events that are related to that client are also displayed. This is a great way to not only enter data but also easily look up client history.

- **C986G0UU07L04-** In session 4, students add records to their database. They then learn how to organize data by sorting it alphabetically, numerically, and chronologically. Next students retrieve information from their database using the Search Box, Selection, and Find features. Afterwards, they consider how an event planner would use each search method to find information FAST!

- **C986G0UU07L05-** In session 5, students follow up on potential leads. They have several clients who have contacted them to plan an event but have not yet confirmed. Event planners design a query by combining data from the Customers and Events tables. This allows them to locate only customers who have not yet confirmed the event. Students produce a report that displays a printout of clients and their telephone numbers. Now event planners can call potential customers to confirm the possibility of working together.

- **C986G0UU07L06-** In session 6, students create a report that summarizes upcoming events. To start, they produce a query in Design View that filters the records to list only those that are scheduled for the upcoming month. This

information is summarized in a report created in Design View. This professional document can be used at a staff meeting to discuss job duties, as a guide when booking other events, or as a reference document for scheduling services.

Teacher Resources

- **C986G0UU07L00** - The Teacher's Resources lesson includes all the materials needed to implement the **TECHNO**Kids project. The resources in this lesson are the project teacher guides, flash cards, letters for parents and students, etc.

- **C986G0UU07L07** - In this session the teacher will have a project review, rubrics of Skills and Content Knowledge, letters for parents, students' certificates, assessments, etc.

Project Software

- Microsoft Access 2013

- Adobe Reader (install at www.adobe.com)

This project is available for the Office 2010 version.

- TechnoPlanner 2010 - C986G0UU01L00 to C986G0UU01L07

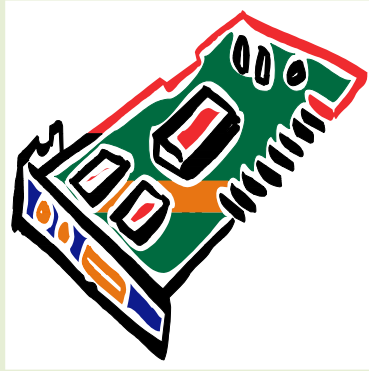**Some exercises may vary depending on the version of the Office.**

Subject: **TECHNO**`Kids`	Grade: 10-12
Course: Senior	
Project: TECHNOSpecialist 2016	**Code:** C986G0UU09L00 - C986G0UU09L07

Project Overview

Introduction to **TECHNO**`Specialist`

In this project, students become information technology specialists who work for a company that manufactures and sells personal computers. The business has launched a new initiative that will have consumers choose components for their computer. It is called "Your Computer, Your Way!" To help the customer pick the right hardware component to suit their needs, students create an information package using Microsoft PowerPoint. The package explains the aspects to consider when selecting devices using bulleted lists, tables, graphic organizers, clip art, picture files, video, and sound clips. The information package is transformed into a presentation, interactive tutorial, web page, and handout to educate the purchaser.

Students complete the following tasks:

- **C986G0UU09L01-** In session 1, students become Information Technology Specialists. Their job is to help customers purchase computer hardware by creating an information package that explains computer parts in simple terms. To prepare for this task, students learn about different types of computers, input devices, and output devices. Afterwards, they use Microsoft PowerPoint to customize the slide master to make a unique design for their information package. Upon completion, students use the slide master to create a title and introduction slide.

- **C986G0UU09L02-** In session 2, students learn about the importance of data storage. To start, they consider the reasons a computer needs to store data and are introduced to terminology used to measure storage capacity. Next, they learn about storage devices including a floppy disk, CD, DVD, flash drive, and hard drive. They apply their knowledge to create slides about each device to educate consumers about the purpose of various data storage devices. Next, students compare the storage capacity of each device and create a slide that contains a comparison chart.

- **C986G0UU09L03-** In session 3, students learn about the two types of memory, RAM and ROM. They read information to discover why the computer needs memory and how it affects performance. Afterwards, students summarize the facts about RAM and ROM using a graphic organizer. This new slide in the information package will help customers gain an understanding of what to consider when purchasing a computer.

- **C986G0UU09L04-** In session 4, students become familiar with the microprocessor. To understand why this computer part is the main factor in computer speed and efficiency, the history, function, and operation are studied. Afterwards a slide is constructed that explains to customers, in a simple way, the importance of the microprocessor and what should be considered when making a purchasing decision.

- **C986G0UU09L05-** In session 5, students learn about the monitor, graphics card, and sound card. To start they study the attributes that affect picture quality, such as contrast ratio, pixel pitch, and resolution. They summarize this

information in a table. Next, students gain an understanding about how the computer produces sound. Afterwards, they write a simple explanation about the sound card and place a recorded sound clip about this component onto the slide.

- **C986G0UU09L06-** In session 6, students prepare to launch the company initiative, Your Computer, Your Way. To start, they edit the spelling and add speaker notes to each slide. Students then practice sharing the information package with customers by presenting the slide show to an audience, using the recently created speaker notes and pen to illustrate important points. Next, they save the information package with a new filename, to create an interactive tutorial that uses hyperlinks and action buttons to allow customers to access the information at a kiosk. Afterwards, they save the presentation as a video so that it can be viewed on any computer, emailed, or posted to the Internet. Finally, students print the information package as a handout. Customers will now be able to select computer components competently thanks to the versatile Your Computer, Your Way information package.

Teacher Resources

- **C986G0UU09L00** - The Teacher's Resources lesson includes all the materials needed to implement the **TECHNO**Kids project. The resources in this lesson are the project teacher guides, flash cards, letters for parents and students, etc.

- **C986G0UU09L07** - In this session the teacher will have a project review, rubrics of Skills and Content Knowledge, letters for parents, students' certificates, assessments, etc.

Project Software

- Microsoft PowerPoint 2016

- Adobe Reader (download from www.adobe.com)

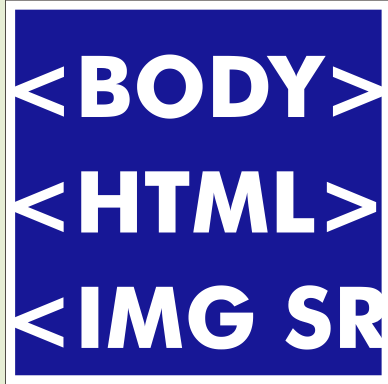**This project is available for the Office 2010 and Office 2013 version.**

- TECHNOSpecialist 2010 - C986G0UU02L00 to C986G0UU02L08

- TECHNOSpecialist 2013 - C986G0UU06L00 to C986G0UU06L08

Some exercises may vary depending on the version of the Office.

Subject: **TECHNO**Kids	Grade: 10-12

Course: Senior	

Project: TECHNOHTML	Codes: C986G0UU03L00 - C986G0UU03L07

Project Overview

Introduction to **TECHNO**HTML

In this project, students construct a web page using HTML coding. To begin, they discuss basic Internet terminology and practice search skills. Once familiar with how to locate information on the World Wide Web, they examine source code to gain an understanding of HTML. Afterwards, they manipulate the coding to learn more about how each tag functions. When they can confidently use tags to change the appearance of text and graphics, students then plan the content of their own web page. It will include a background, formatted text, graphics, and hyperlinks. Construction starts on the web pages, with the designers paying close attention to the layout and appearance. When they are complete, the files are uploaded to a server, to offer a valuable contribution to the World Wide Web.

Students complete the following tasks:

- **C986G0UU03L01-** In Session 1, students gain an understanding of the Internet and HTML. To begin they learn some basic terminology and consider the importance of the Internet in their lives. Afterwards, they read about key events in the development of this amazing technology. Once familiar with the history, students learn about the World Wide Web and use Microsoft Internet Explorer to view web pages. They then are introduced to HTML and its importance in the world today. Afterwards, they view the source code for web pages and decode the meaning. Upon completion of this session, students should have a basic understanding of Internet terminology and HTML code.

- **C986G0UU03L02-** In Session 2, students learn how to crack HTML code. The examination of a sample page will allow students to understand the meaning of basic tags. The opportunity to edit this coding, and experiment with the programming language will provide an interactive experience, which will help students learn HTML. Once students understand the structure of the source code, they plan for the design of their personal web site. They get organized by searching for information, pictures, and interesting hyperlinks using the Internet which will provide them with the material they need in order to publish their page.

- **C986G0UU03L03-** In Session 3, students begin to design their web page using HTML tags. Following their plan, students add a title, header, and some text to their page. They format the text by changing the color and font size. Students customize their page by changing the background color and adding lines and extra space.

- **C986G0UU03L04-** In Session 4, students continue to design their web page using HTML coding. They insert pictures, as well as hyperlinks, to create an interesting page layout. The emphasis in this session is on web page construction.

- **C986G0UU03L05-** In Session 5, students investigate how search engines work. With an understanding of how these tools function, students add meta tags to their HTML document. Then students use a checklist to take a critical look at their page and make the necessary improvements to get it ready for the publication.

- **C986G0UU03L06**- In Session 6, students register for a free web site account with Freeservers. Then they upload the web page that they created and the associated image files. Finally, the class has a HTML Developers Conference in which they view each other's web pages and write compliments about the sites.

Teacher Resources

- **C986G0UU03L00** - The Teacher's Resources lesson includes all the materials needed to implement the **TECHNO**Kids project. The resources in this lesson are the project teacher guides, flash cards, letters for parents and students, etc.

- **C986G0UU03L07** - In this session the teacher will have a project review, rubrics of Skills and Content Knowledge, letters for parents, students' certificates, assessments, etc.

Project Software

- Notepad

- Internet Explorer

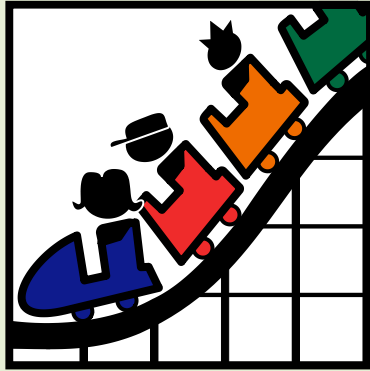- Adobe Reader (install at www.adobe.com)

Subject: **TECHNO**Kids	Grade: 10-12
Course: Senior	
Project: **TECHNO**Wonderland 2016	Code: C986G0UU08L00 - C986G0UU08L07

Project Overview

Introduction to **TECHNO**Wonderland

In this project, students become marketing executives for an amusement park. This challenging job has them use Microsoft Office to complete a wide range of job duties. To start, they create a poster in Microsoft Word advertising the thrilling rides and spectacular shows guests can experience. The fun continues when internet research is conducted for an animal exhibit to develop placards for the enclosure. Their next task has students become involved in selecting a new attraction by graphing survey data using Microsoft Excel. This exciting new addition is promoted by creating a video using Microsoft PowerPoint. Afterwards to generate a buzz about the attraction, season ticket holders are rewarded for their loyalty with an invitation created using Microsoft Publisher to an exclusive event. With the year drawing to a close, amusement park data is analyzed using a Microsoft Access database with the goal to improve customer satisfaction in the future.

Students complete the following tasks:

- **C986G0UU08L01-** In session 1, students create an amusement park. To start, they select the thrill rides, exhibits, shows, and other services available to guests. Once a plan has been developed they use Microsoft Word to promote this exciting tourist attraction. Using text, clip art, pictures, and more, students develop the word processing skills necessary to create an attention-grabbing poster.

- **C986G0UU08L02-** In session 2, students conduct Internet research to prepare placards for an animal exhibit. To start, they are introduced to basic search strategies. They apply these skills to locate facts about the animal that visitors will find interesting. Afterwards, students expand their word processing skills to create information signs using Microsoft Word that are posted around the attraction. They learn how to adjust page orientation, set the margin, apply a page border, and more!

- **C986G0UU08L03-** In session 3, students must develop a solution to increase visitor traffic. Conduct a survey to learn about the types of attractions that appeal to a particular age group. Organize the data in a worksheet and chart the results using Microsoft Excel. Afterwards, analyze the information to determine what needs to be added to the amusement park to attract a particular visitor.

- **C986G0UU08L04-** In session 4, students create a video advertisement to publicize an attraction. This marketing promotion will run on electronic billboards throughout the park. Using Microsoft PowerPoint, students create a series of eye-catching slides using text boxes, pictures, clip art, and WordArt. Transitions and simple animation are applied to the presentation. Upon completion, the advertisement is saved as a video.

- **C986G0UU08L05-** In session 5, students invite guests to the opening of an exciting new attraction. Only amusement park season ticket holders can attend this exclusive event. Using Microsoft Publisher, students create

an invitation that encourages people to visit the park and join in the celebration.

- **C986G0UU08L06-** In session 6, students examine amusement park data. To start, they are introduced to Microsoft Access and database terminology. Afterwards, they view a summary of the attractions available to guests. By filtering the records, students learn about the popularity of rides, aging exhibits, and location of essential services. Once familiar with how to use a database, they enter a record of the latest addition to the park.

Teacher Resources

- **C986G0UU08L00-** The Teacher's Resources lesson includes all the materials needed to implement the **TECHNO**Kids project. The resources in this lesson are the project teacher guides, flash cards, letters for parents and students, etc.
- **C986G0UU08L07-** In this session the teacher will have a project review, rubrics of Skills and Content Knowledge, letters for parents, students' certificates, assessments, etc.

Project Software

Install the following software on workstation(s).

- Microsoft Office Word 2016
- Internet Explorer
- Microsoft Office Excel 2016
- Microsoft Office PowerPoint 2016
- Microsoft Office Publisher 2016
- Microsoft Office Access 2016
- Paint (included with Windows 7 operating system)
- Adobe Reader (download at www.adobe.com)

This project is available for the Office 2010 and Office 2013 version.

- TechnoWonderland 2010 - C986G0UU04L00 to C986G0UU04L07
- TechnoWonderland 2013 - C986G0UU05L00 to C986G0UU05L07

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