<u>**Webpage Programming and Design Assignment 02 (CCIT4058)**</u>

<u>**Customizing your website with DHTML (HTML / CSS /JavaScript)**</u>

This assignment makes up 15% of your course total. Submission date is as follows:

****
Due date: 13 December 2021, 23:59. No late submission will be accepted.
****

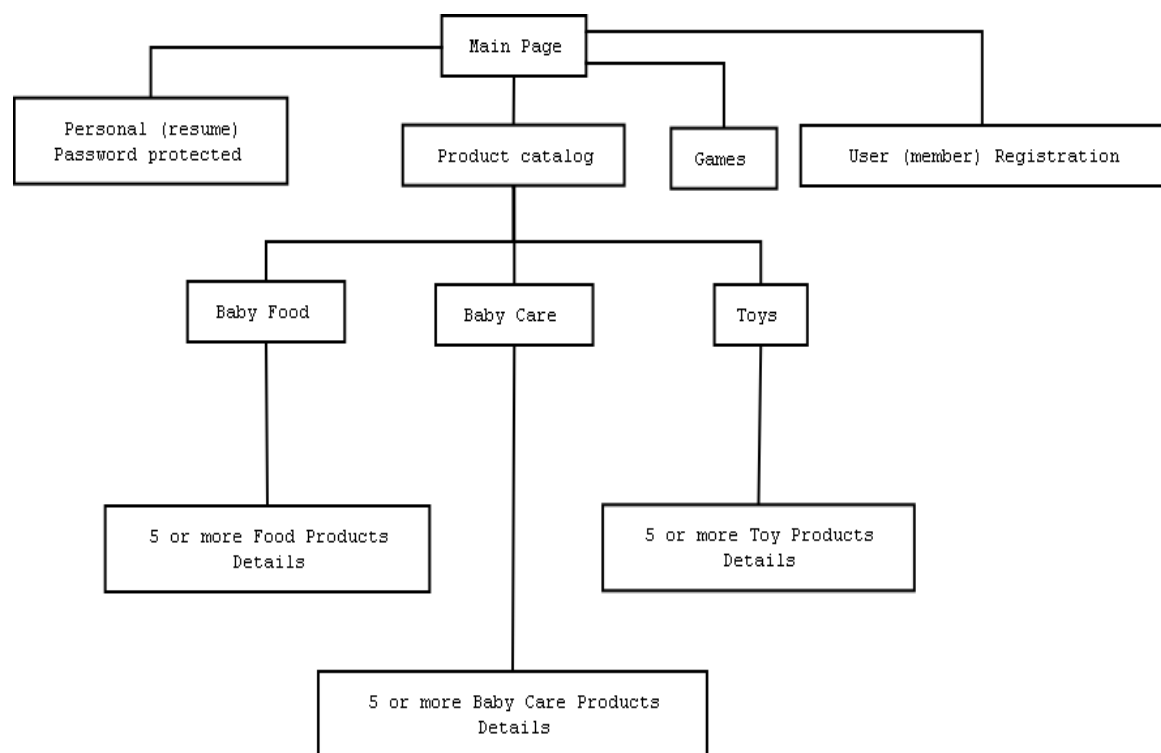**Introduction – Reliable Baby Product Specialist (RBPS) Company Limited**

Since the last creation of your personal website, you have decided to go SOHO (Small Office Home Office), and you are the sole technical officer of your web site. This time you are to commercialize your personal site to make it more attractive to promote your products. You will name you company as **Reliable Baby Product Specialist (RBPS) Company Limited**, which specializes in selling of high-tech baby foods and products with modern web technologies. To promote you company's image and products, you have decided to create your company's web site.

In this regard, you are to provide relevant contents to support your web page design.

The contents should contain both images and textual descriptions presented in DHTML / JavaScript technologies for at least five different kinds of baby food or products.

Web site structure specification

The top menu (main page) should provide a catalog of product categories for customers. The catalog should be classified as three different sub-categories as shown in the following schematic diagram:

Main Page

Personal (resume) Password protected | Product catalog | Games | User (member) Registration

Baby Food | Baby Care | Toys

5 or more Food Products Details

5 or more Toy Products Details

5 or more Baby Care Products Details

In each category, you should provide information about 5 products. For examples, in the baby food products page, you should present information about 5 or more different kinds of food in form of text and images. However, user registration will NOT be implemented at this stage, and it can be ignored from the scope of implementation for the moment.

Keep your personal web site

You are to keep your personal portfolio within the baby food site as a link pointing to the founder's page of the company. In addition, you need to provide a JavaScript password login before the user gains access to your resume page. JavaScript login can only provide a basic level of protection because it is insecure! The more secure login function can be achieved by perhaps a server-side technology such as PHP, ASP.Net or Node.js in the future. The password should be set as "JavaScript" by default for testing and marking purposes.

Game within your site – a memory game or other games as you wish

In order to attract parents and children to visit the site more frequently, and also to make them stay longer, you are to implement a game page. As a start, you may create a memory game of matches of different baby foods or products. It is expected that the

memory game should have at least 3 levels of difficulty. As such, the player can play the game according to his or her choice of difficulty:

1. A basic level, the default level is a 4 x 4 matrix. (8 pairs of matches)
2. An intermediate level, scales to a 4 x 6 matrix (12 pairs of matches)
3. An advanced level, which scales to a 4 x 8 matrix (16 pairs of matches)

Note: Students can implement any other games but still need to provide 3 levels of difficulty.

DHTML and JavaScript techniques

The following DHTML/JavaScript effects should be implemented in you web site. However, you may include any additional effects that would make your site more attractive.

Effect on Web Pages

No	Effect	Description
1	Top Navigational Bar	Use the appropriate technology to implement a manual that will help user to easily navigate within your site.
2	Live Clock	At live clock that show the current time and date
3	Floating images (up and down)	A floating image that goes from bottom of the page to catch user's attentions and showing some information.
4	Fade-in slideshow	An image fades away, and reappearing again. It then repeats the same sequence of pictures.
5	Image Rollover	Implement this with mouse events, to create effects that when mouse moves into a picture, it changes and shows another picture, when the moue is moved away from the picture then another picture shows.
6	Elastic Trail Script (optional)	On of the famous effect you will find in many web sites, a mouse trail of elastic marble string that follows the mouse pointer. May only be implemented in game page
7	Dynamic Content	Pop-up message in as small web-window. Showing messages or advertisement.

Animations

You should provide at least 2 JavaScript enabled animations in any 2 of your web pages in your site. It is up to you to decide what to put in a page and what animations you want to create.

Cookies / localStorage for tracking users (optional with bonus marks)

Provide a registration menu for the user to register to your site. Once the user has got registered then use JavaScript cookie / localStorage to indicate how many times the same user has stepped into your site during his or her subsequent visits. It is probably good to use this tracking on the main manual page (however, where to put it is up to you), when the user first steps into your site. Try to prompt the user to do registration when the first time he / she reaches your site. When the next time the same user steps into the site, an advertisement would be shown to him/her. It probably can be use along with effect 7 described above.

Documentation

You are also expected to provide a report with clear but brief explanation of the above effects (such as using float charts, or pseudo code, or brief comments). A brief description of the design of your website including structures, logical sequences, and a brief guide for the user should also be given. State the difficulties you may have encountered and the solutions for getting round these problems should be elaborated. A reflection on what you have learnt though the web development and future improvement should be suggested if any. The document should be limited to a maximum total of 6 pages only including screen captures. Quote any references where necessary, and please respect copyrights.

Uploading your web pages and coding

All source codes should be zipped and uploaded to SOUL for marking purposes.

<div align="center">

~End~

</div>