



EASTERN UNIVERSITY, SRI LANKA
DEPARTMENT OF MATHEMATICS
THIRD EXAMINATION IN SCIENCE - 2008/2009
SECOND SEMESTER (Sep./Nov., 2010)
OC 351 – PRACTICAL WORK ON OC 305

Answer all questions

Time: 2 hours

1. Create the Payroll form shown below in Visual Basic Programming language.

Number of hours must be entered as well as the appropriate rate.

Gross salary = rate * hours.

Net salary = gross salary - deductions.

Weekly Payroll

Employee name: Joan Wayne

Hours worked: 37.00 Deduction amount: \$100.00

Rate A \$10.00
 Rate B \$12.50
 Rate C \$15.00

Confirm

Gross salary: \$370.00 Net Salary: \$270.00

Cancel Exit

(100 marks)

2.

EzConsulting Inc. is a company doing IT systems consulting work with a large number of clients. At any given time there are dozens of projects. Each employing several employees. In a given period (in this case, weekly) an employee could work on several different projects. In order to track costs and revenues for each project, each employee will submit a timesheet every week showing the number of hours spent on each project. Since all employees are attached to only one department, costs and revenues can be calculated by the department. It has already been determined that the ProjectMgt database will consist of the following tables:

Employees: details on every employee - ID, name, address, telephone, date hired, salary, charge out rate, department

Projects: details of every project - project number, title, budget, start date, end date

Departments: lookup table of departments - number, name, head

Timesheets (Master/Detail): tables to store time spent on projects - date, employee, project number, number of hours.

The first task to be developed in the application consists of table maintenance. For each of the main tables - Employees, Projects and Departments, there have to be ways to add new records, remove records that are no longer needed and change records when appropriate. For example, new employees are hired and other employees leave, the name of a department is changed or a new project is started. Each of these maintenance operations will require a separate form

(Once the maintenance functions are in place, and they have to be (remember: referential integrity dictates that you can't accept a timesheet for a non-existent employee or non-existent project), we can start working on the operational functions, entering timesheets and producing reports. There will be forms for these tasks also)

To make it easier to access the different forms, create an Application Menu . The layout of the Menu form is standard and the code consists of a series of Load and Show statements for the various forms. Sample menu form and maintenance operations form are as follows.

The screenshot shows the 'ezConsulting Inc' Application Menu. It features a title bar with the company name. Below the title bar, there are two main sections: 'Maintenance functions' and 'Operational functions'. The 'Maintenance functions' section contains three buttons: 'Employees', 'Projects', and 'Departments'. The 'Operational functions' section contains two buttons: 'Timesheets' and 'Reports'. At the bottom of the menu, there is a single 'Exit' button.

The screenshot shows the 'ezConsulting Inc' Maintenance Operations form. It features a title bar with the company name. Below the title bar, there is a 'Find Title:' field with the value 'xyz'. Below this, there are several input fields: 'Project number' (99-44), 'Title' (XYZ Corp Payroll System), 'Budget' (555666), 'Start date' (2000-05-05), and 'End date' (2000-10-10). At the bottom, there are four buttons: 'Add', 'Delete', 'Reset', and 'Exit'. Below the buttons, there is a 'Projects' field with a list of project numbers and navigation arrows.

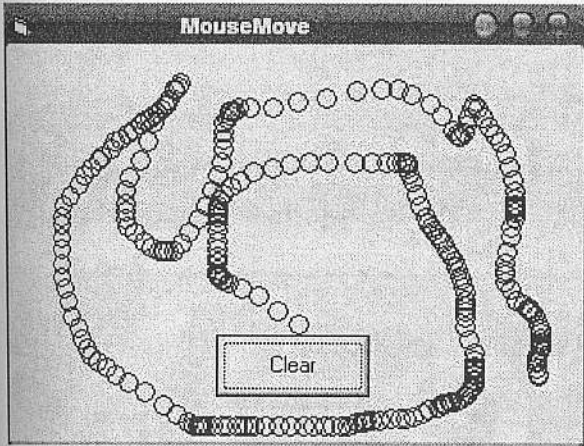
Create an application project for the above company. Write codes to operate the above form controls. Save the project in your floppy.

(100 marks)

3. The mouse events can be combined with graphics methods and any number of customized drawing or paint applications can be created. The following application combines MouseMove and MouseDown events, and illustrates a drawing program.

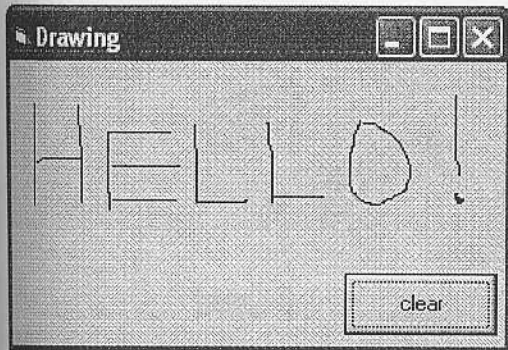
Write programs in Visual Basic to get the following output:

i)



(50 marks)

ii)



(50 marks)

4. Create a table using Data manager in Visual basic programming language.

i. Using crystal report creates a sample report for the above table.

(50 marks)

ii. Using Data project create a sample report for the above table.

(50 marks)

