

Capstone

INSTRUCTOR
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1) **Introduction:**

This document has been created to provide you with the necessary means of what this application can do. What it is all about. How to use the application and its functionality as well as what was used in the design and creation of this software program. You will see information on surveys taken as well as online research that was done that explains the much need for this application to be created. This application will allow a company to organize the training program better by taking the Instructor, the Employee, the Training Material and the Budget for such training and placing it all on one application. There is a several different sections for Employees, Instructors, Department and Courses to be taken for training purposes. Each section allows you to Create, Read, Updated, and Delete Information based on the needs of the organization and provides a good understanding of what budgets are available, what courses are being assigned. Also, the employees assigned to such trainings can give you a general idea of what budgets are needed. and to provide you will details and assignments of instructors based on their expertise on the training being given.

2) **System Architecture:**

The architectural design of this application will give you a good understanding of structure of this application. Assuming that the consumer has the capability and system setup to utilize cloud-based technology such as Azure the data being created from the software and migrate it to the cloud, thus making it accessible via the internet. Since there are several sections that the architecture is focused on I am going to break them down so there is a better understanding of what is going on with this application. This will involve a computer that has access to the internet. An end user will be able to access the database via a link created with Azure Cloud based technology. Will need it accessible via the intranet connection to keep it secure from outsiders being able to access the database. This is also assuming that the consumer can save data on a server to maintain record of the information.

3) **Data Design:**

To structure the data properly we will need a section that allows for adding and updating data for not one entity, but all entity built within this database. This is done by creating a website that takes in data and updates it to the cloud and/or database in another location offsite.

When creating the **Employee tab**, the site will need to have Columns with headers from left to right for Last Name, First Name, Employee ID, and date they were enrolled into the training program. At the top there will be a Title that says Employees. To Create, update, read, or delete the data there will need to be links generated to allow for each task to be completed one per entity that has been added to the database. Copyright label must show onsite at the bottom. Immediately above the Columns there will be a search bar that can search for an Employee saved to this database. Above the Search bar and below the

Title will have a link to create a new employee. Once the end user clicks the link a new page opens asking you to enter Last Name, First Name, and Enrollment Date. Once all information has been entered there will be a button at the bottom of the entry fields that says Create and will update the database with a new Employee and show up on the list of employees enrolled in the program.

When creating the **Courses tab**, the site will need to have Columns with headers from left to right for Number, Title, and Department, At the top there will be a Title that says Courses. To Create, update, read, or delete the data there will need to be links generated to allow for each task to be completed one per entity that has been added to the database. Copyright label must show onsite at the bottom. Immediately above the Columns there will be a drop-down menu that will allow you to filter out departments. Above the Search bar and below the Title will have a link to create a new Course. Once the end user clicks the link a new page opens asking you to enter Number, Title, and Department. The Department will be a drop down of the departments that have been created in the Departments section and will allow you to choose which one. Once all information has been entered there will be a button at the bottom of the entry fields that says Create and will update the database with a new Course and show up on the list of Courses assigned to the program.

When creating the **Instructors tab**, the site will need to have Columns with headers from left to right for Last Name, First Name, Hire Date, Office, and Courses. At the top there will be a Title that says Instructors. To Create, update, read, or delete the data there will need to be links generated to allow for each task to be completed one per entity that has been added to the database. Copyright label must show onsite at the bottom. Below the

Title and above the Column section will have a link to create a new Instructor. Once the end user clicks the link a new page opens asking you to enter Last Name, First Name, Hire Date, and Office there will also be radio buttons that allow the end user to assign a training program to the given instructor. Once all information has been entered there will be a button at the bottom of the entry fields that says Create and will update the database with a new Instructor and show up on the list of Instructors enrolled in the program.

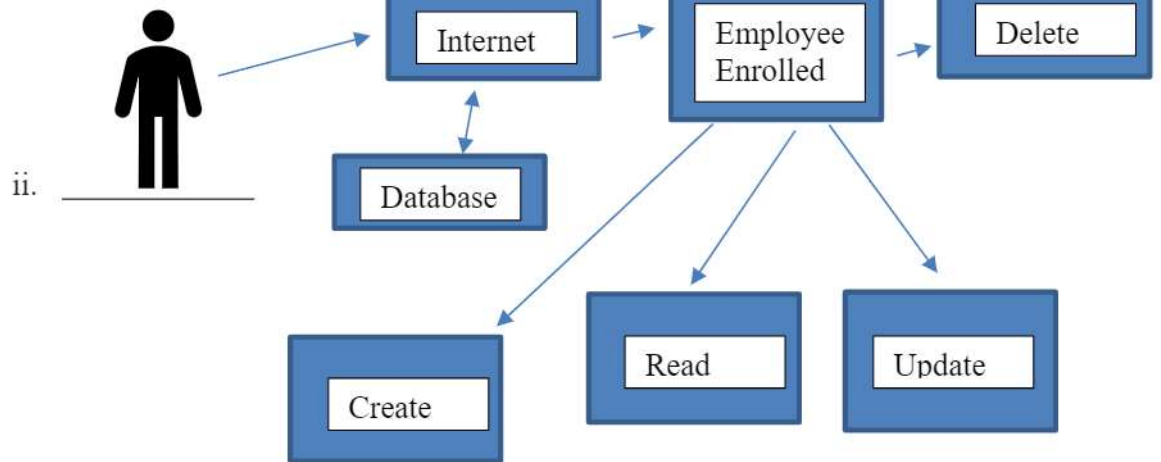
When creating the **Department tab**, the site will need to have Columns with headers from left to right for Name, Budget, Start Date, and Administrator. At the top there will be a Title that says Departments. To Create, update, read, or delete the data there will need to be links generated to allow for each task to be completed one per entity that has been added to the database. This page will display department names, the budget that each department has, when the funds became available and who is responsible for the department and funds provided. Copyright label must show onsite at the bottom. Below the Title and above the Column section will have a link to create a new Instructor. Once the end user clicks the link a new page opens asking you to enter Name, Budget, Start Date, and gives the option to choose instructor assigned to a given department using a drop-down window. Once all information has been entered there will be a button at the bottom of the entry fields that says Create and will update the database with a new Instructor and show up on the list of Instructors enrolled in the program.

4) Component Design:

a. Use Case Diagrams:

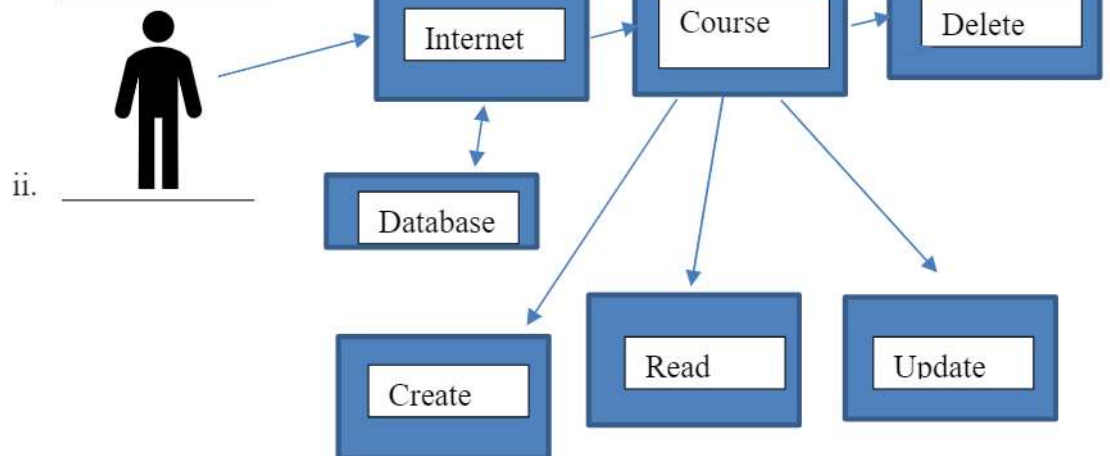
This allows the end user to access a database via the internet to create, read, update and delete data.

i. Employee Section

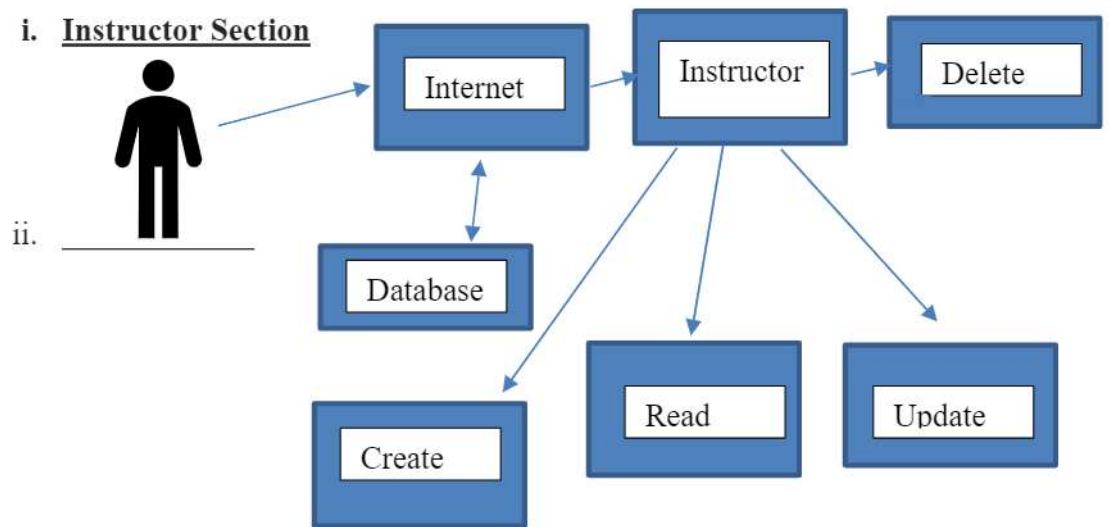


b. Use Case Diagrams:

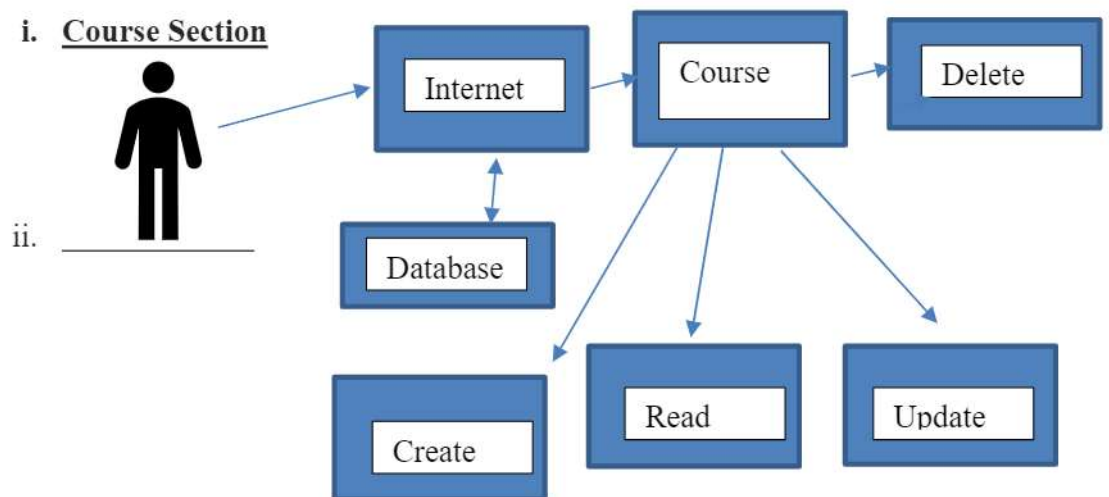
i. Course Section

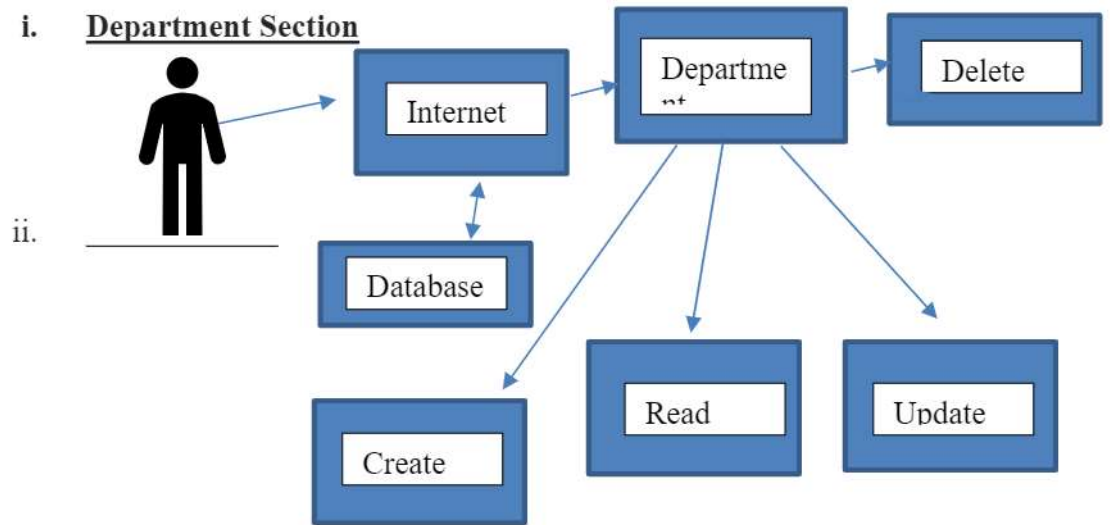


- c. Use Case Diagrams:
This allows the end user to access a database via the internet to create, read, update and delete data.



- d. Use Case Diagrams:
This allows the end user to access a database via the internet to create, read, update and delete data.

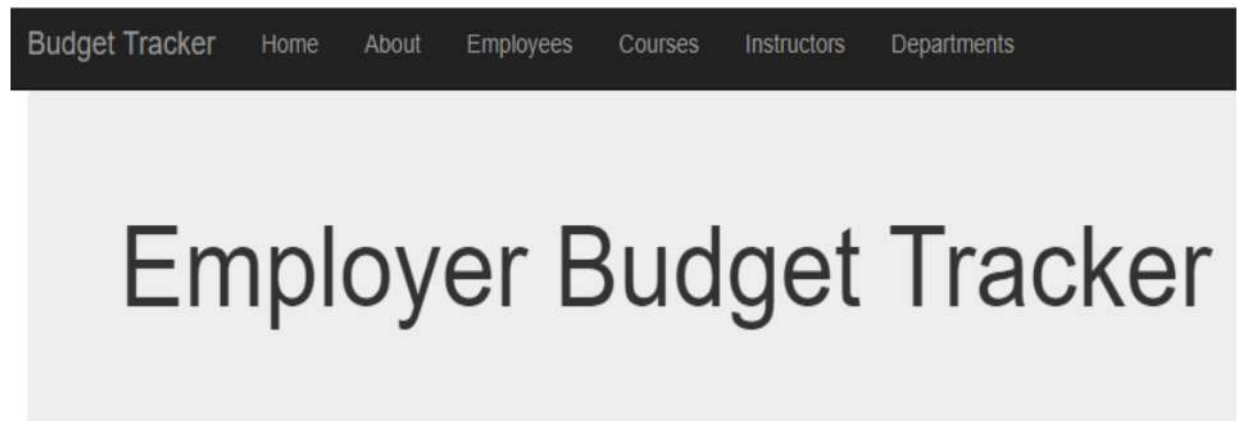




5) Human Interface Design:

- a. This section shows the look and feel of the application once it has been complete and fully operations. This will do everything from creating data, to reading, updating and deleting data.

Home Page



Welcome to this site

This application will allow you to keep track of your training budget as well as the courses being taught within the company. You can create, read, update and delete data based on the particular needs of the company. The information involved on this site include Employees, Instructors, Departments, and Courses. You can even get the statistics of how many employees are enrolled and what date they enrolled in the training program.

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About Section

Budget Tracker Home About Employees Courses Instructors Departments

Employee Training Stats

Enrollment Date	Employee
2/20/2018	2
2/23/2018	1
3/1/2018	1
3/2/2018	1

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Employee Section

Budget Tracker Home About Employees Courses Instructors Departments

Employees

[Create New](#)

Find by name:

Last Name	First Name	Enrollment Date	
Crawford	Leonard	2018-03-02	Edit Details Delete
Jensen	Travis	2018-02-23	Edit Details Delete
Olsen	Shane	2018-03-01	Edit Details Delete

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Edit

Student

Last Name

Crawford

First Name

Leonard

Enrollment Date

03/02/2018

Save

[Back to List](#)

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Details

Student

Last Name	Crawford	
First Name	Leonard	
Enrollment Date	2018-03-02	
Enrollments	<table><thead><tr><th>Course Title</th></tr></thead></table>	Course Title
Course Title		

[Edit](#) | [Back to List](#)

Delete

Are you sure you want to delete this?

Student

Last Name Crawford
First Name Leonard
Enrollment Date 2018-03-02

[Delete](#) | [Back to List](#)

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Course Section

Courses

[Create New](#)

Select Department: [Filter](#)

Number	Title	Department	
1357886	Shipping	Shipping	Edit Details Delete
6675585	Team Leads	Team Leads	Edit Details Delete
8775635	Customer Service	Customer Service	Edit Details Delete
9842388	Sales	Sales	Edit Details Delete

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Create

Course

Number**Title****Department**

Customer Service ▼

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Edit

Course

Number

1357886

Title**Department**[Back to List](#)

Details

Course

Department Shipping**Number** 1357886**Title** Shipping[Edit](#) | [Back to List](#)

Delete

Are you sure you want to delete this?

Course

Department Shipping
Number 1357886
Title Shipping

Delete

| [Back to List](#)

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Instructor Section

Instructors

[Create New](#)

Last Name	First Name	Hire Date	Office	Courses	
Douglas	Michael	2010-08-17	East	1357886 Shipping 9842388 Sales	Select Edit Details Delete
Johnson	Marty	2007-03-04	West	8775635 Customer Service	Select Edit Details Delete
Michello	Andy	1996-04-10	East	6675585 Team Leads	Select Edit Details Delete
Nicholas	Anthony	2016-06-14	North	6675585 Team Leads 8775635 Customer Service	Select Edit Details Delete

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Create

Instructor

Last Name

First Name

Hire Date

mm/dd/yyyy

Office Location

☐ 1357886 Shipping
 ☐ 6675585 Team Leads
 ☐ 8775635 Customer Service
☐ 9842388 Sales

Create

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Instructors

[Create New](#)

Last Name	First Name	Hire Date	Office	Courses	
Douglas	Michael	2010-08-17	East	1357886 Shipping 9842388 Sales	Select Edit Details Delete
Johnson	Marty	2007-03-04	West	8775635 Customer Service	Select Edit Details Delete
Michello	Andy	1996-04-10	East	6675585 Team Leads	Select Edit Details Delete
Nicholas	Anthony	2016-06-14	North	6675585 Team Leads 8775635 Customer Service	Select Edit Details Delete

Courses Taught by Selected Instructor

	Number	Title	Department
Select	1357886	Shipping	Shipping
Select	9842388	Sales	Sales

Edit

Instructor

Last Name**First Name****Hire Date****Office Location**

☒ 1357886 Shipping ☐ 6675585 Team Leads ☐ 8775635 Customer Service
☒ 9842388 Sales

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Details

Instructor

Office Location	East
Last Name	Douglas
First Name	Michael
Hire Date	2010-08-17

[Edit](#) | [Back to List](#)

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Delete

Are you sure you want to delete this?

Instructor

Office Location	East
Last Name	Douglas
First Name	Michael
Hire Date	2010-08-17

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Department Section

Budget Tracker Home About Employees Courses Instructors Departments				
Departments				
Create New				
Name	Budget	Start Date	Administrator	
Shipping	\$100,000.00	2018-01-01	Douglas, Michael	Edit Details Delete
Sales	\$350,000.00	2018-01-01	Michello, Andy	Edit Details Delete
Customer Service	\$280,000.00	2018-01-01	Johnson, Marty	Edit Details Delete
Team Leads	\$490,000.00	2018-01-01	Michello, Andy	Edit Details Delete
Support	\$350,000.00	2018-01-01	Douglas, Michael	Edit Details Delete
Management	\$530,000.00	2018-01-01	Michello, Andy	Edit Details Delete
Mandatory All	\$730,000.00	2018-01-01	Douglas, Michael	Edit Details Delete
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Budget Tracker Home About Employees Courses Instructors	
Create Department	
Name	<input type="text"/>
Budget	<input type="text"/>
Start Date	<input type="text" value="mm/dd/yyyy"/>
Administrator	<div>Douglas, Michael ▼</div>
	<div>Create</div>
Back to List	
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Edit

Department

Name

Budget

Start Date

Administrator



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Details

Department

Name	Shipping
Budget	\$100,000.00
Start Date	2018-01-01
Administrator	Douglas, Michael

[Edit](#) | [Back to List](#)

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Delete

Are you sure you want to delete this?

Department

Administrator	Douglas, Michael
Name	Shipping
Budget	\$100,000.00
Start Date	2018-01-01

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