The Use of Microsoft based Technologies for the benefit of the Community

Prof. Avi Mendelson – Microsoft
-- avim@microsoft.com

Prof. Yehuda Afek – afek@tau.ac.il

Mr. Hillel Avni - hillel.avni@gmail.com
Agenda

- Isolated Storage
General

- For each application the system defines a special secure area that only the application can access.

- The storage is located on the flash drive and so survives reboot.
  - Please note that on the emulator the ISOstorage is removed each time the emulator is killed.

- This section provides few simple examples, more explanations can be found in the “blue book” section 12, and in MSDN - http://create.msdn.com/en-US/education/basics/isolated_storage
Simple example

```csharp
private void save_Click(object sender, RoutedEventArgs e)
{
    var appStorage = IsolatedStorageFile.GetUserStoreForApplication();

    string fileName = "simple.txt";

    using (var file = appStorage.OpenFile(fileName, FileMode.OpenOrCreate, FileAccess.Write))
    {
        using (var writer = new StreamWriter(file))
        {
            writer.Write(infoTextBox.Text);
        }
    }
}

private void clear_Click(object sender, RoutedEventArgs e)
{
    infoTextBox.Text = "";
}

private void open_Click(object sender, RoutedEventArgs e)
{
    using (var store = IsolatedStorageFile.GetUserStoreForApplication())
    {
        {
            infoTextBox.Text = sr.ReadToEnd();
        }
    }
}
```
Example 2 – The use of Directories

- Directory is a generic data structure in .NET that allows you to store a value together with a key.
- In this example we allow saving details of products and retrieve them if found.
• Note: Description field cannot contain space

• The `product_List` is declared outside so observable to all functions.

• The class can be defined after its use
Save operation

- In this example we save data for two products
- The code of the saving is below

```csharp
private void Save_Click(object sender, RoutedEventArgs e)
{
    Product p1 = new Product { Name = NameBox.Text, ID = SNBox.Text, Description = DescBox.Text };
    Product_list.Add(p1.Name, p1);
}
```
Load Operation

```csharp
private void Load_Click(object sender, RoutedEventArgs e) {
    if (NameBox.Text != "") {
        if (Product_list.ContainsKey(NameBox.Text)) {
            Product P2 = new Product();
            P2 = Product_list[NameBox.Text];
            SNoBox.Text = P2.ID;
            DescBox.Text = P2.Description;
        }
        else NameBox.Text = "No Product";
    }
}
```