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Assignment 5.3

The screenshot shows a web application window titled "Assignment 5.3" with standard window controls. The main heading is "Student Data Serialization". The interface is divided into three main sections:

- Student Details (Left Panel, Light Red):** Contains the heading "Enter data to serialize" and four input fields: "First Name*", "Last Name*", "Comment", and "Private Key". Below these is a "Serialize By" dropdown menu currently set to "Binary". A "Serialize and Create File" button is at the bottom.
- Select a file to deserialize (Middle Panel, Light Cyan):** Features a large file selection area and a "Serialized Data:" label above another large text area.
- Deserialize the selected file (Right Panel, Light Blue):** Displays four input fields for "Student ID", "First Name", "Last Name", and "Comment". A note at the bottom states: "Note: Private Key is not serializable".

List of Features:

- ✓ Student ID is saved as auto increment
- ✓ First and last names input validation
- ✓ Private Key is Non-Serialized
- ✓ Serialize data options: Binary, XML, & JSON
- ✓ Student records viewer
 - ✓ Click on file to view plain text of serialized data
 - ✓ Recreate Student object & display in text boxes (*disabled editing*)

Empty Input Validation

Assignment 5.3

Student Data Serialization

Student Details

Enter data to serialize

First Name*

Last Name*

Comment

Private Key

Serialize By Binary

Serialize and Create File

Select a file to deserialize

Deserialize the selected file

Student ID

First Name

Last Name

Comment

Note: Private Key is not serializable

Input Required

Both first and last name entry is required!

OK

Valid Input Validation

Assignment 5.3

Student Data Serialization

Student Details

Enter data to serialize

First Name*

Last Name*

Comment

Private Key

Serialize By Binary

Serialize and Create File

Select a file to deserialize

Deserialize the selected file

Student ID

First Name

Last Name

Comment

Note: Private Key is not serializable

Serialization Successful!

Your inputs is serialized as Binary data.

OK

Select a file to deserialize

Binary_Tai_Huynh_1.txt

Click on a file to view text & object

Assignment 5.3

Student Data Serialization

Student Details

Enter data to serialize

First Name* Tai

Last Name* Huynh

Comment Awesome Job!

Private Key Secret Sauce Pepper

Serialize By Binary

Serialize and Create File

Select a file to deserialize

Binary_Tai_Huynh_1.txt

Serialized Data:

```
|| yyyy||
EAssignment5.3, Version=1.0.0.0,
Culture=neutral, PublicKeyToken=null|| ||A
ssignment5_3.Student|| ||<Sid>
k__BackingField||<First Name>
k__BackingField||<Last Name>
```

Deserialize the selected file

Student ID 1

First Name Tai

Last Name Huynh

Comment Awesome Job!

Note: Private Key is not serializable

XML Serialization

Assignment 5.3

Student Data Serialization

Student Details

Enter data to serialize

First Name* Tai

Last Name* Huynh

Comment Awesome Job!!

Private Key Secret Sauce Salt

Serialize By XML

Serialize and Create File

Select a file to deserialize

Binary_Tai_Huynh_1.txt
XML_Tai_Huynh_2.xml

Serialized Data:

```
<SOAP-ENV:Envelope
xmlns:xsi="http://www.w3.org/2001/XMLSchema-
instance"
xmlns:xsd="http://www.w3.org/2001/XMLSchema-
ma" xmlns:SOAP-
ENC="http://schemas.xmlsoap.org/soap/encodi
```

Deserialize the selected file

Student ID 2

First Name Tai

Last Name Huynh

Comment Awesome Job!!

Note: Private Key is not serializable

JSON Serialization

Assignment 5.3

Student Data Serialization

Student Details

Enter data to serialize

First Name* Tai

Last Name* Huynh

Comment Awesome Job!!!!!!!!!!!!

Private Key Secret Sauce Curry

Serialize By JSON

Serialize and Create File

Select a file to deserialize

Binary_Tai_Huynh_1.txt
XML_Tai_Huynh_2.xml
JSON_Tai_Huynh_3.json

Serialized Data:

```
{
  "<First Name>": "Tai",
  "<Last Name>": "Huynh",
  "<Sid>": "3",
  "<comment>": "Awesome Job!!!!!!!!!!!!",
  "<Private Key>": "Secret Sauce Curry"
}
```

Deserialize the selected file

Student ID 3

First Name Tai

Last Name Huynh

Comment Awesome Job!!!!!!!!!!!!

Note: Private Key is not serializable