



How to Generate Sequence Diagram from Java?

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Since source code is in text form, it is complex and is hard for human to read or analyze, especially when the logic is complicated and involves a large number of classes. "A picture is worth a thousand words", by visualizing source code with diagram, you can easily realize the classes involve as well as their relationship in run time. In order to help you with that, Visual Paradigm enables you to reverse your Java source code into UML sequence diagram, so that you can gain a better understanding of Java source code by reading diagram instead of looking to a possibly thousand lines of source code. This is very beneficial for both analysis and communication.

1. Download [Sample.zip](#) of this tutorial and extract the zip file to any directory.
2. Study the source code. Read the *register* method in *RegisterController.java* to see how it works.

A screenshot of a Notepad window titled "RegisterController.java - Notepad". The window contains the following Java code:

```
import java.util.*;

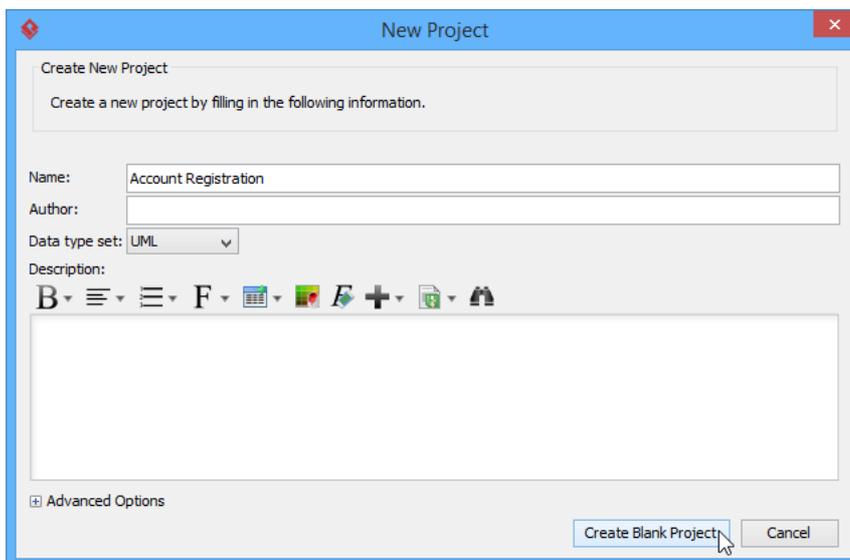
public class RegisterController {

    private List _accounts = new ArrayList();

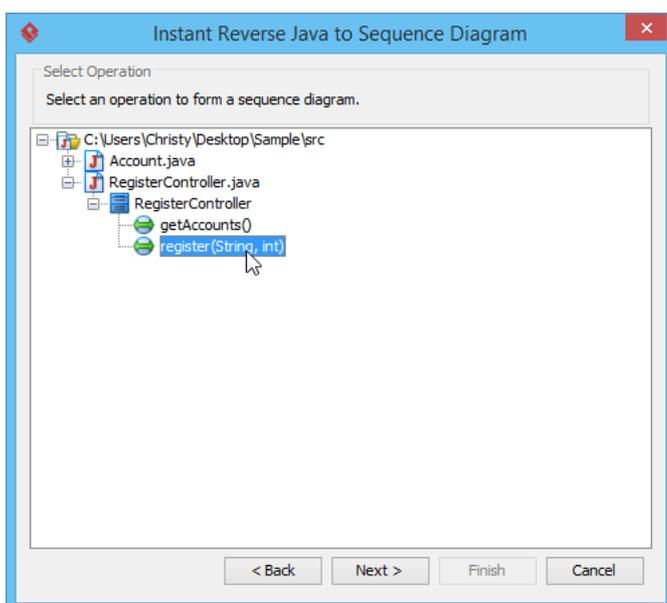
    public void register(String name, int age) {
        Account account = new Account();
        account.setId(1);
        account.setName(name);
        account.setAge(age);
        _accounts.add(account);
    }

    public List getAccounts(){
        return _accounts;
    }
}
```

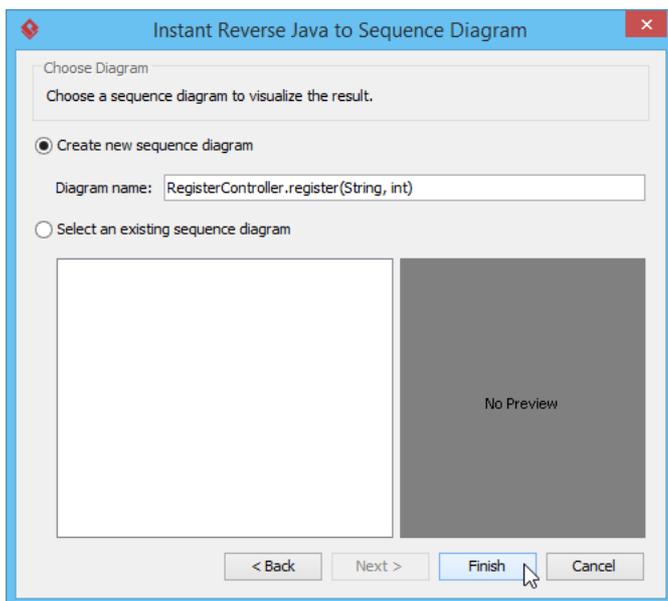
3. Create a new project by selecting **Project > New** from the application toolbar. In the **New Project** window, enter *Account Registration* as project name and click **Create Blank Project**.



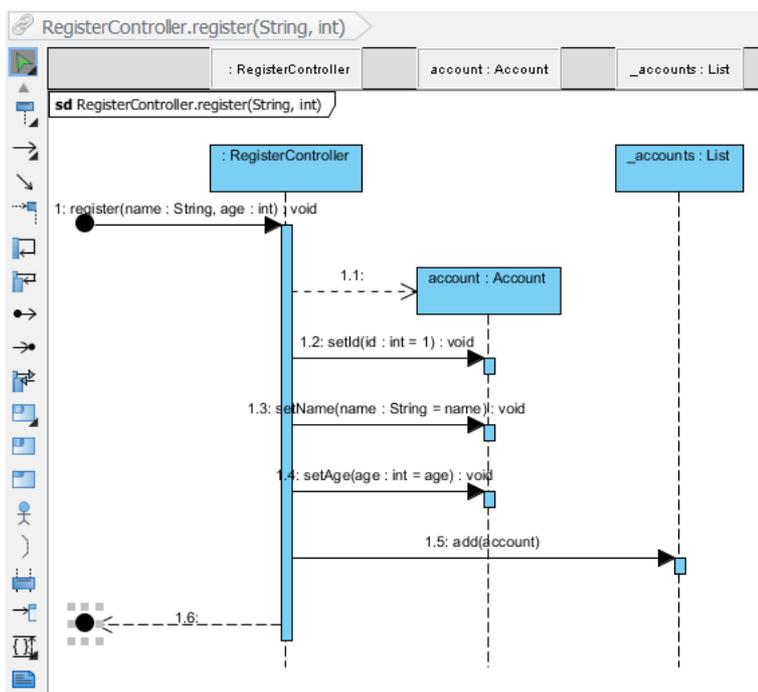
4. Select **Tools > Code > Instant Reverse Java to Sequence Diagram...** from the toolbar.
5. In the **Instant Reverse Java to Sequence Diagram** window, click on **Add Source Folder...** button.
6. Select the extracted source folder src. Click **Next** button.
7. Select the method to visualize. Select **src > RegisterController.java > register (String,int)**. Click the Next button.



- You need to select a diagram to visualize the interaction. The **Create new sequence diagram** option is selected and diagram name is entered by default. Click **Finish** button.



- As a result, a UML sequence diagram is formed. Let's study the diagram.



When a person invokes *RegisterController's* register method (message: 1), it creates an account object (message: 1.1). After that, the controller sets the id, name and age to the account object (message 1.2, 1.3, 1.4) and adds itself to the account list (message: 1.5). The invocation ends with a return (message 1.6).

Resources

1. [Sample.zip](#)

Related Links

- [Instant reverse Java sources to sequence diagram](#)
- [Why Aren't There Any Operations to Choose from in Reverse Engineering of Sequence Diagram?](#)



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(<https://www.visual-paradigm.com/>)

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