

# Creating AddressBook operations

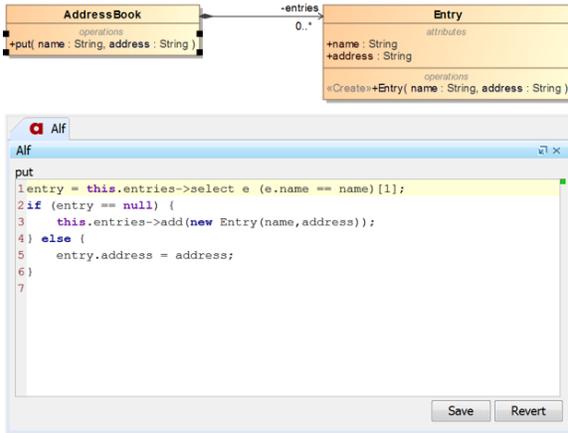
We will now add two operations to the *AddressBook* class, one to put an entry into an *AddressBook* and another to look up an address for a name.

Image TBD

- [The Alf editor](#)
- [Using Alf for Operation methods](#)

To add a *put* Operation to *AddressBook*

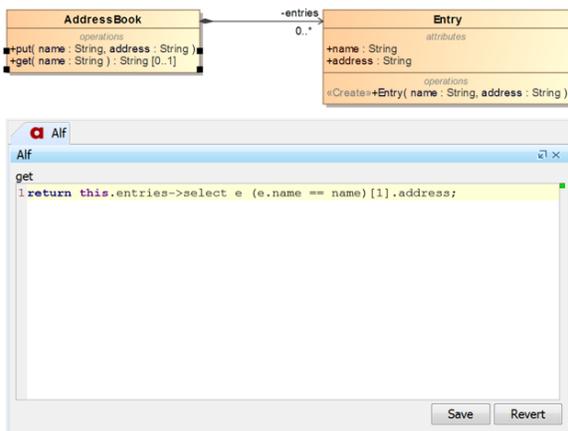
1. Click on the *AddressBook* symbol on the Class Diagram. Click on the little **Create Element** button at the top right of the Class symbol, and select **Operation**.
2. Type *put* as the name of the Operation and, *inside the parentheses*, type the parameter list *name: String, address: String*, then press **Return**.
3. Click on the new *put* Operation, select **Create Method > Behavior**, and then select **Opaque Behavior (or Activity)**.
4. Click on the *put* Operation again, and open the [Alf editor](#) window (select **Windows > Alf**), if it isn't already open.
5. Type the Alf code shown in the following figure.



6. When the text is correct, click **Save**.

To add a *get* Operation to *AddressBook*

1. Click on the *AddressBook* symbol on the Class diagram. Click on the little **Create Operation** button to the top right of the *Operations* compartment.
2. For the operation and its signature, enter *get(name: String): String[0..1]* and press **Return**. (Make sure you don't leave the default "()" at the end of what you enter.)
3. Click on the new *get* Operation, select **Create Method > Behavior**, and then select **Opaque Behavior (or Activity)**.
4. Click on the *get* Operation again, and open the [Alf editor](#) window (select **Windows > Alf**), if it isn't already open.
5. Type the Alf code shown in the following figure.



6. When the text is correct, click **Save**.



You may want to consider yourself how to code a `remove(name: String)` Operation that removes an entry from an `AddressBook`.

Next: [Testing the AddressBook](#)