

# Worksheet: Event Based Programming

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A logged in user would like to get the articles they authored using the `getArticles(username)` request to fetch their articles. The request returns an object that has a list of articles that looks like the following:

```
{ author: username, articles: ["I like Rice", "What will be names of the 12th college"] }
```

Can you modify the code from slide 13 to safely get the user's articles? Why or why not?



# Get Articles for logged in users with DDTs

```
var username = ...
var password = ...
...
var regUser = newDataDrivenFuture();
var logUser = newDataDrivenFuture();
var logOut = newDataDrivenFuture();
...
async(() -> regUser.put(registerNewUser(username, password))); // returns { user: username, result: "success" or "failure"}
...

asyncAwait(regUser, () -> { if (regUser.safeGet().result.equals("success"))
    logUser.put(loginUser(username, password)); // returns {user: username, result: "success" or "failure"}
    else
    logUser.put({user: username, result: "failure" });    });
...

asyncAwait(logUser, () -> { if (logUser.safeGet().result.equals("success"))
    logOut.put(logoutUser(logUser.safeGet().user)); // returns { user: username, result: "success" or "failure" }
    else
    logOut.put({user: logUser.safeGet().user, result: "failure" });    });
...

```



# Get Articles for logged in users with DDTs

```
var username = ...
var password = ...
var regUser = newDataDrivenFuture();
var logUser = newDataDrivenFuture();
var logOut = newDataDrivenFuture();
var articles = newDataDrivenFuture();
...
async(() -> regUser.put(registerNewUser(username, password))); // returns { user: username, result: "success" or "failure"}

asyncAwait(regUser, () -> { if (regUser.safeGet().result.equals("success"))
    logUser.put(loginUser(username, password)); // returns {user: username, result: "success" or "failure"}
    else
    logUser.put({user: username, result: "failure" }); });

asyncAwait(logUser, () -> { if (logUser.safeGet().result.equals("success"))
    logOut.put(logoutUser(logUser.safeGet().user)); // returns { user: username, result: "success" or "failure" }
    else
    logOut.put({user: logUser.safeGet().user, result: "failure" }); });

asyncAwait(logUser, () -> { if (logUser.safeGet().result.equals("success"))
    articles.put(getArticles(logUser.safeGet().user)); // returns { author: username, articles: ["a1", "a2", "a3"] }
    else
    articles.put({author: username, articles: [] }); });
```

**Not safe. What happens if the logout task completes before the get article task?**

