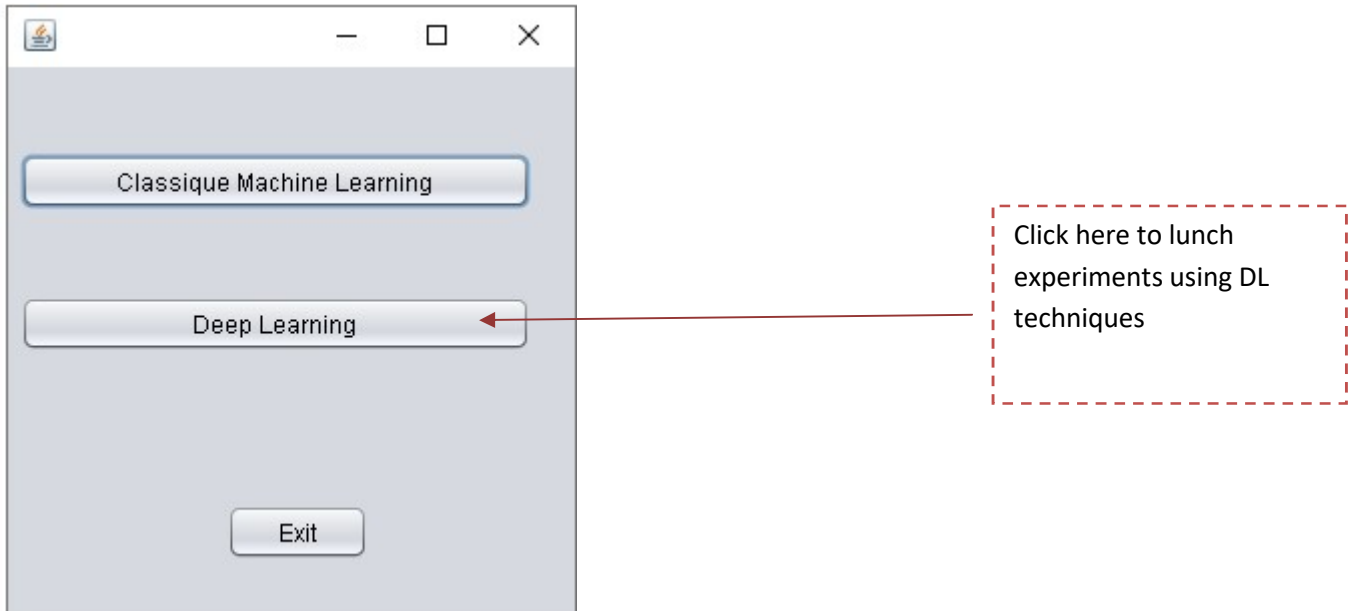


1) Run the app

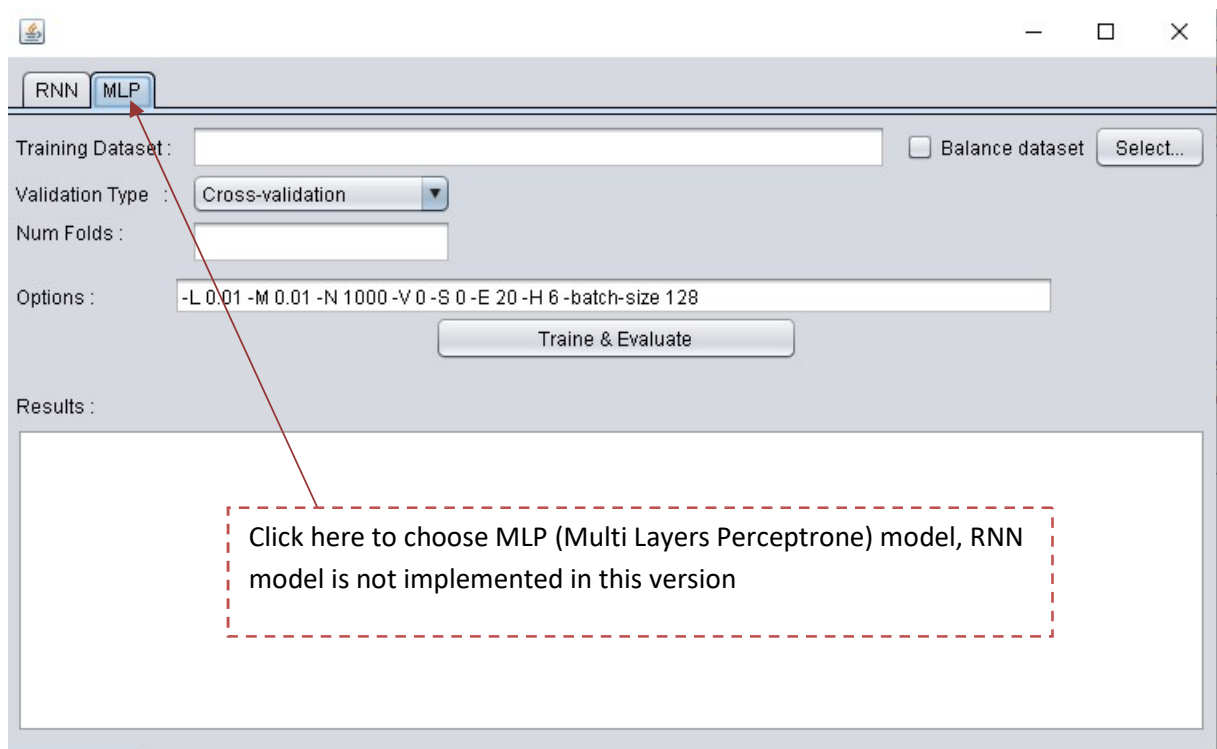
To run the app, type in a command window (cmd.exe) opened in the containing folder, the following command :

```
java -jar ./ZM_Vul_Prediction2.jar
```

2) Choosing DL



2) Choose MLP



3) Setting-up the experiment :

The screenshot shows a software window with the following components:

- Tabs:** 'RNN' and 'MLP' (selected).
- Training Dataset:** A text input field.
- Balance dataset:** A checkbox.
- Select...:** A button next to the 'Balance dataset' checkbox.
- Validation Type:** A dropdown menu currently showing 'Cross-validation'.
- Num Folds:** A text input field.
- Options:** A text input field containing the command: `-L 0.01 -M 0.01 -N 1000 -V 0 -S 0 -E 20 -H 6 -batch-size 128`.
- Train & Evaluate:** A button.
- Results:** A large empty text area for displaying results.

Folds
number of
the cross-
validation (3 or 10)

Click here to
lunch the
experiment
(train and test
the DNN)

Click here to
select the
dataset file
(.arff)

Check this,
to balance
the data

This text field contains the options for training the DNN , the important parameters are:

- L : the learning rate (0.01)
- M : the momentum (0.01).
- H : number of hidden layers ('6' means 1 HL with 6 neurons, '6,2' means 2 HL the first with 6 neurons and the second with 2 neurons, '5,8,7' means 3 HL the first with 5 neurons and the second with 8 neurons and the third with 7 neurons),
- N : the number of epochs to train through (number of iterations).

This text area,
show the results