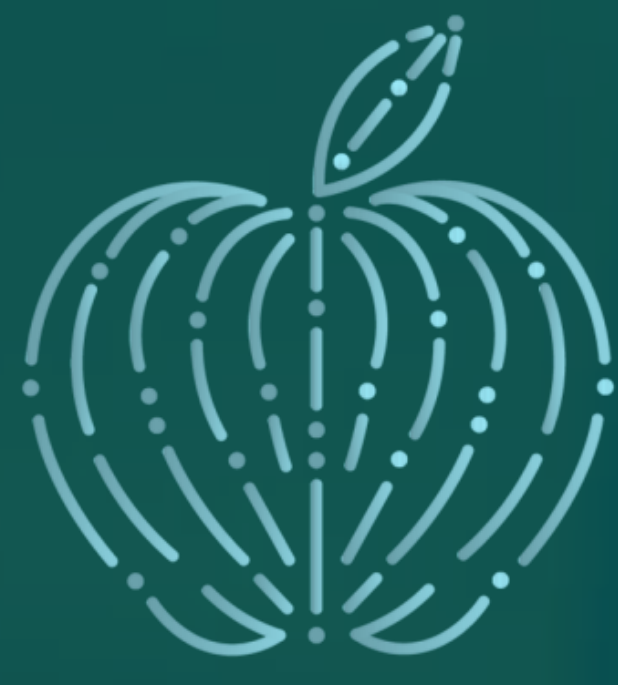


# ENACTEST project

## Industry –Academia Gap



The ENACTEST project aims to create coherent and timely teaching materials for testing, taking into account both industry needs and students' cognitive models in order to improve students' learning performance while reducing industry's training needs for testing.

Fernando Pastor Ricós & Beatriz Marín & Tanja Vos

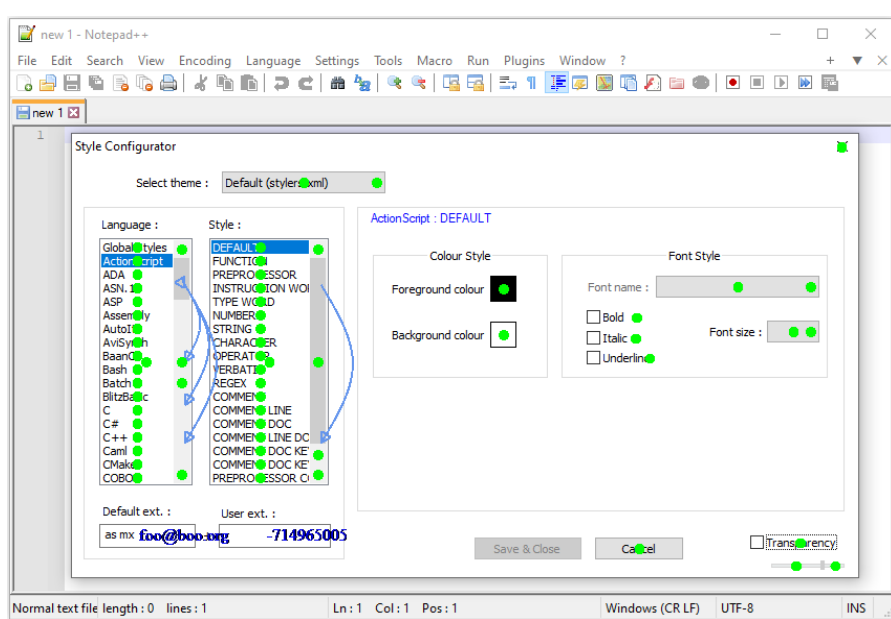
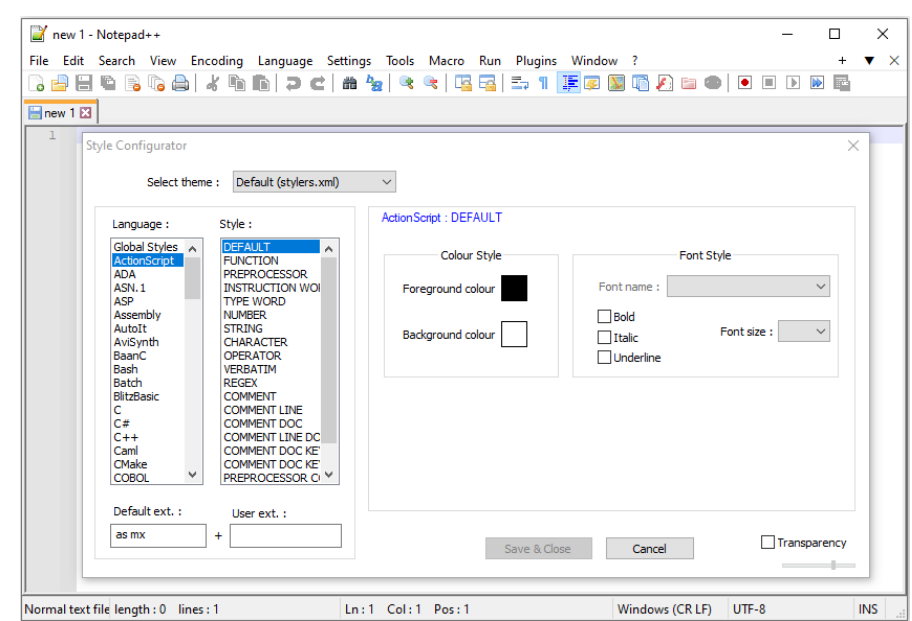
### Capsule: Regression testing with GUI change detection

In modern software development, projects evolve rapidly with frequent GUI changes that impact the user experience. Identifying and validating these changes during regression testing can be time-consuming and error-prone, particularly for newcomers who often struggle to correlate code changes with GUI changes.

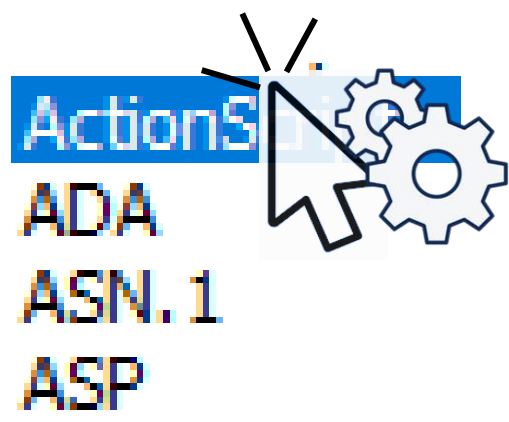
The GUI change detection approach is an automated solution that compares state models across successive software versions to detect and highlight added, removed, and changed GUI states.

#### 2. Derive all possible Actions

#### 1. Detect all available widgets (State)



#### 3. Select and execute an action



#### 4. Save State Model transitions

### Objectives of the capsule:

- ✓ Understand the importance of regression testing and learn about automated solutions to support effective GUI validation
- ✓ Learn about the scriptless testing capabilities of the TESTAR tool to automatically infer GUI state models
- ✓ Learn about the capabilities of the GUI change detection tool to automatically detect and highlight GUI changes

