**Pseudocode (front-end user point of view)**

User is interacting with the MiUdemy e-learning system:

* Display main menu option:
  + - 1. Browse courses
      * 1.1 Display available course categories
      * 1.2 User selects a category
      * 1.3 View all courses
      * 1.4 Display course list with details
        + (name, price , description)
      * 1.5 Uses selects a course
      * 1.6 To view the selected course details
      * 1.7 Enrol
        + 1.7.1 Add course to user’s enrolled courses list
        + 1.7.2a Deduct course price from the user’s balance account
        + 1.7.2b card payment
    - 2. Search courses
      * 2.1 Enter search keywords
      * 2.2 Enter the filters criteria
      * 2.3 Display search results matching the criteria
      * 2.4 User selects a course to view details or enroll
      * 2.5 Enrol
        + 2.5.1 Add course to user’s enrolled courses list
        + 2.5.2a Deduct course price from the user’s balance account
        + 2.5.2b card payment
    - 3. View cart
      * 3.1 Display course
      * 3.2 Added to the cart
      * 3.3 Enrol
        + 3.3.1 Add course to user’s enrolled courses list
        + 3.3.2a Deduct course price from the user’s balance account
        + 3.3.2b card payment
    - 4. View profile
      * Display user information
      * Enrolled the course
      * View the history
      * View the certifications which user got
      * Change the preference
      * Set alarm criteria
    - 5.logout/Sign In
      * End the session

Rendering()

* Render the top navigation bar
* Render the user details in the display
* Render the ToDoList, personalized recommending
* Initialization
* Initialize variable
* Initialize data structures

Register user

* Check username
* Check Password

Finding courses

* Show the list
* Sorting
* Filtering

Create course

* Add modules to course
* Uploading the materials
* Create the hierarchical of the course
* Generate the community group in the “community page”
* Generate 1:1 tutoring or mentorship service in the “pair-up” service

Enroll users in courses

* Check the availability of the course
* Check the enrolment date
* Show the details of the course
* Payment