

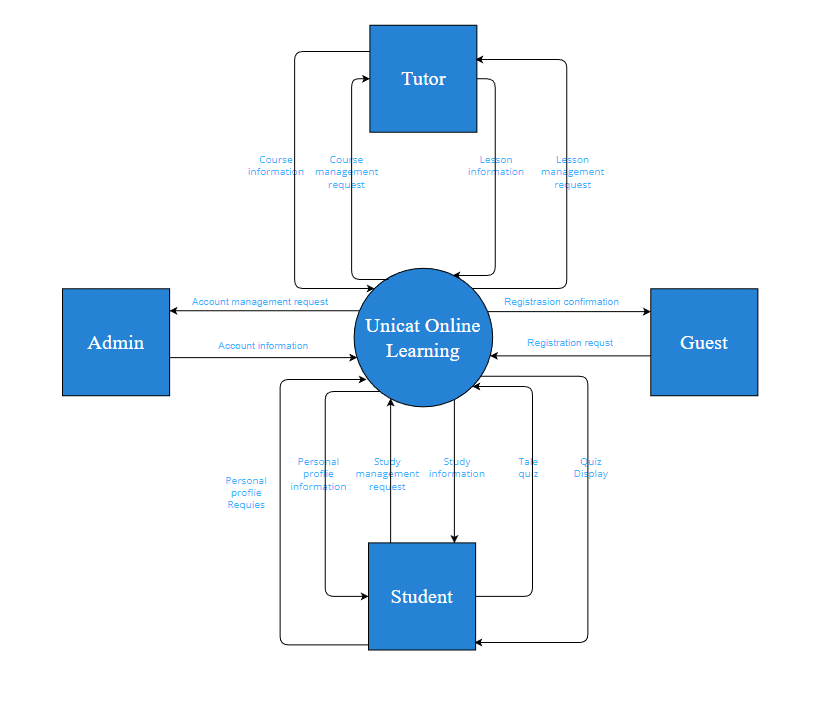
**UNICAT LEARNING ONLINE**

**Software Requirement Specification**

– Hanoi, Feb 2023 –

***1. Product Overview***

Online learning system is a system that allows users to access available courses, a system that provides information about the completion of courses, and discussions about questions.



*Figure 1: Context diagram*

***2. User Requirements***

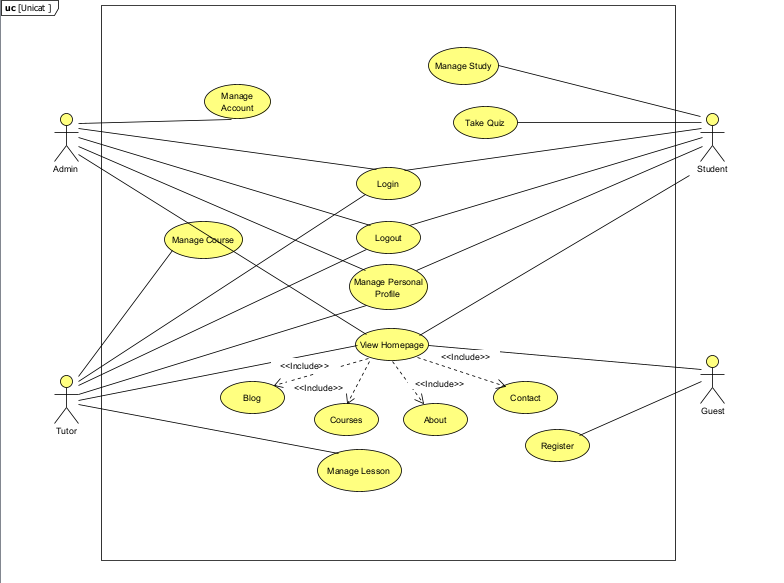
***2.1 Actors***

| **#** | **Actor** | **Description** |
| --- | --- | --- |
| 1 | Admin | The Web manager who manages the web’s contents, manages the publishing course,... |
| 2 | Tutor(s) | The person who can create a new course and update the course. |
| 3 | Student(s) | The registered user who joins in courses, practises, takes the test. |
| 4 | Guests | User who does not login. Only view course information but not lesson details |

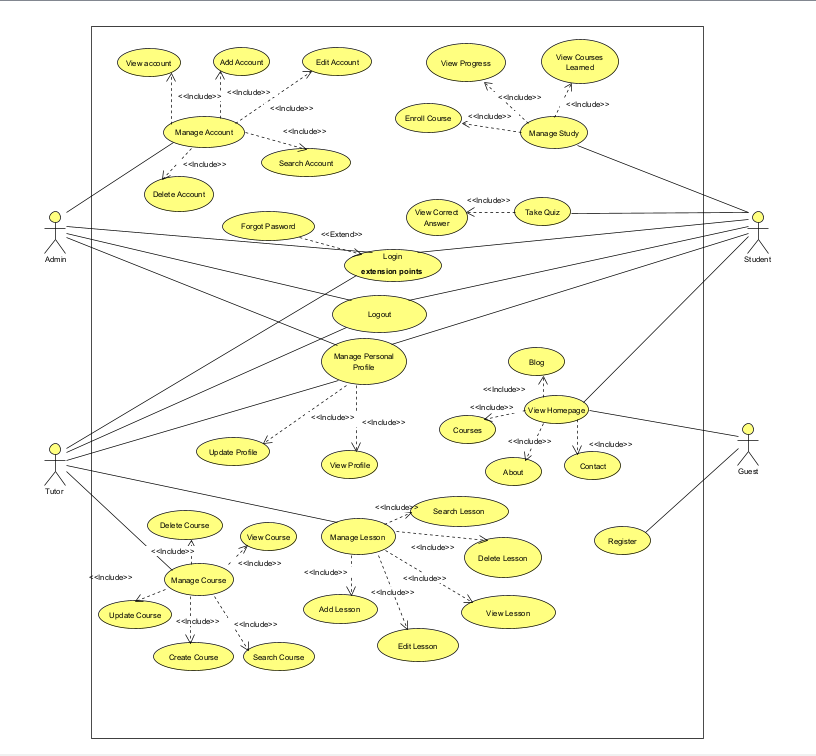
*Table 1: Actors*

***2.2 User Cases***

***2.2.1 Use Case Diagrams***

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*Figure 2: High level use case diagram*

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*Figure 3: Detailed use case diagram*

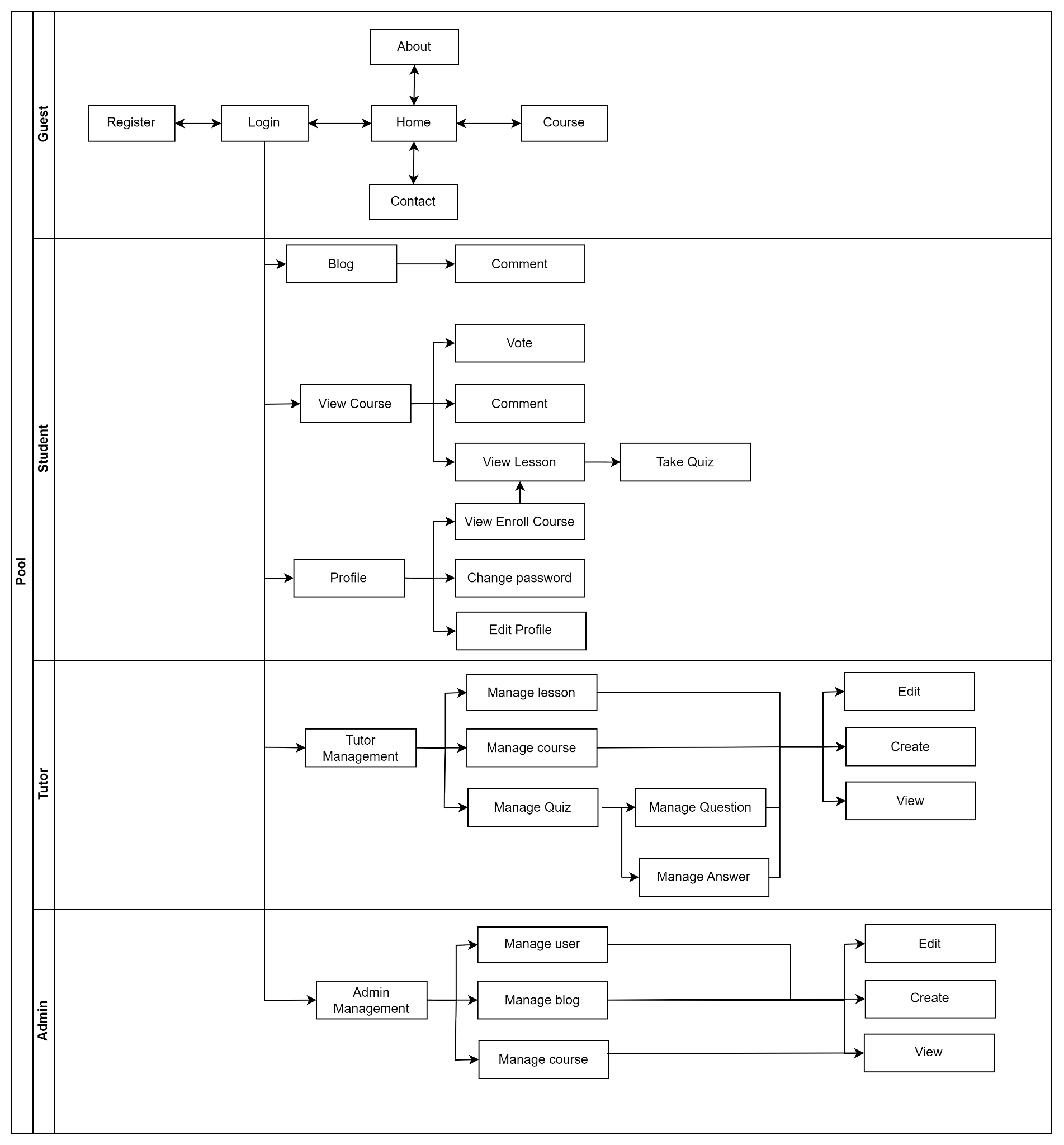
***2.2.2 Use Case Descriptions***

| **ID** | **Use Case** | **Actors** | **Use Case Description** |
| --- | --- | --- | --- |
| 01 | Manage Account | Admin | This function allows the admin to view all accounts in the system by clicking the account management button from the sidebar. |
| 02 | Add Account | Admin | This function allows the admin to add a new account into the system by clicking the “Add” button and filling out the form with account information. |
| 03 | View Account | Admin | This function allows the admin to view account information in the system by clicking on the view icon in the column on the account management page. |
| 04 | Edit Account | Admin | This function allows the admin to edit information of an account in the system by clicking on the edit icon on the column on the account management page. |
| 05 | Search Account | Admin | This function allows the admin to search an account by entering the name in the search box. |
| 06 | Delete Account | Admin | This function allows the admin to delete an account in the system by clicking the delete icon in the column on the account management page. |
| 07 | Manage Course | Tutor / Admin | This function allows the tutor or admin to view all courses in the system by clicking the course management button from the sidebar. |
| 08 | View Course | Tutor | This function allows the tutor to view course details in the system by clicking on the view icon in the column on the course management page. |
| 09 | Search Course | Tutor | This function allows the tutor to search a course by entering the name in the search box. |
| 10 | Create Course | Tutor | This function allows the tutor to create a new course into the system by clicking the “Create” button and filling out the form with course information. |
| 11 | Update Course | Tutor | This function allows the tutor to update information about a course in the system by clicking on the update icon on the column on the course management page. |
| 12 | Delete Course | Tutor | This function allows the tutor to delete a course in the system by clicking the delete icon in the column on the course management page. |
| 13 | Manage Lesson | Tutor | This function allows the tutor to view all lessons of a course in the system by clicking the lesson management button from the sidebar then clicking into course need to view. |
| 14 | Add Lesson | Tutor | This function allows the tutor to add a new lesson into the system by clicking the “Add” button and filling out the form with lesson information. |
| 15 | Search Lesson | Tutor | This function allows the tutor to search a lesson by entering the name in the search box. |
| 16 | Delete Lesson | Tutor | This function allows the tutor to delete a lesson in the system by clicking the delete icon in the column on the lesson management page. |
| 17 | View Lesson | Tutor | This function allows the tutor to view lesson details in the system by clicking on the view icon in the column on the lesson management page. |
| 18 | Edit Lesson | Tutor | This function allows the tutor to edit information about a lesson in the system by clicking on the edit icon on the column on the lesson management page. |
| 19 | Manage Study | Student | This function allows students to view study management navigation. |
| 20 | Enrol Course | Student | This function allows students to enrol in a course to study by clicking the “Enrol” button in the course details screen. |
| 21 | View Progress | Student | This function allows students to view study progress in the sidebar which includes all lesson titles. |
| 22 | View Courses Learned | Student | This function allows students to view all courses which they have learned in the user profile screen. |
| 23 | Take Quiz | Student | This function allows students to practise what they have just learned by pressing the “Take quiz” button on the screen and doing the exercises. |
| 24 | View Correct Answer | Student | This function allows students to view the correct answer when students finish all the quizzes by clicking the “Finish” button on the quiz screen. |
| 25 | Register | Guest | This function allows guests to register a new account in the system. |
| 26 | View Home Page | Student, Guest | This function allows students and guests to view Show sliders, hot posts, featured subjects, the sidebar with the latest posts, static contacts/links.Shown slider information includes its image and title, Shown latest Blog information includes its thumbnail, title, post-date, Shown top courses information includes its thumbnail, title, tag line, Shown all tutors information includes its thumbnail, title, tag line. |
| 27 | Blog | Student, Guest | This function allows students and guests to view all blogs with pagination. |
| 28 | Courses | Student, Guest | This function allows students and guests to view all Courses with pagination. |
| 29 | About | Student, Guest | This function allows students and guests to view everything they need to know about the “Unicat Online learning” Website. |
| 30 | Contact | Student, Guest | This function allows students and guests to view all Contacts about the website. |
| 31 | Login | Admin, Tutor, Student | This function allows actors to log into the system to access the functionality of the system. |
| 32 | Log out | Admin, Tutor, Student | This function allows actors to logout of the system. |
| 33 | Forgot Password | Admin, Tutor, Student | This function allows actors to change to a new password when having forgotten the password. |
| 34 | Manage Personal Profile | Admin, Tutor, Student | This function allows the actor to manage personal profile |
| 35 | Update Profile | Admin, Tutor, Student | This function allows actors to change personal information in the system by clicking the “Edit” button. |
| 36 | View Profile | Admin, Tutor, Student | This function allows the actor to view personal profile |
| 37 | Quiz Manager | Tutor | This function allows the tutor or admin to view all quizzes in the system by clicking the Quiz management button from the sidebar. |
| 38 | View Quiz | Tutor | This function allows the tutor to view quiz details in the system by clicking on the view icon in the column on the quiz management page. |
| 39 | Create Quiz | Tutor | This function allows the tutor to create a new quiz into the system by clicking the “Create” button and filling out the form with quiz information. |
| 40 | Search Quiz | Tutor | This function allows the tutor to search a quiz by entering the name in the search box. |
| 41 | Update Quiz | Tutor | This function allows the tutor to update information about a quiz in the system by clicking on the update icon on the column on the quiz management page. |
| 42 | Delete Quiz | Tutor | This function allows the tutor to delete a quiz in the system by clicking the delete icon in the column on the quiz management page. |
| 43 | Add Quiz | Tutor | This function allows the tutor to add a new quiz into the system by clicking the “Add” button and filling out the form with quiz information. |
| 44 | Answer Manager | Tutor | This function allows the tutor or admin to view all answers in the system by clicking the Answer management button from the sidebar. |
| 45 | View Answer | Tutor | This function allows the tutor to view answer details in the system by clicking on the view icon in the column on the answer management page. |
| 46 | Create Answer | Tutor | This function allows the tutor to create a new answer into the system by clicking the “Create” button and filling out the form with answer information. |
| 47 | Search Answer | Tutor | This function allows the tutor to search a answer by entering the name in the search box. |
| 48 | Update Answer | Tutor | This function allows the tutor to update information about a answer in the system by clicking on the update icon on the column on the answer management page. |
| 49 | Delete Answer | Tutor | This function allows the tutor to delete a answer in the system by clicking the delete icon in the column on the answer management page. |
| 50 | Add Answer | Tutor | This function allows the tutor to add a new answer into the system by clicking the “Add” button and filling out the form with answer information. |

*Table 2: Use Case list and description*

***3. Functional Requirements***

***3.1.1 Screen Flow***

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***3.1.2 Screen Description***

| **#** | **Feature** | **Screen** | **Description** |
| --- | --- | --- | --- |
| 1 | Manage account | Manage account | Display all accounts in the system |
| 2 | Manage account | Edit account | Display pop-up form with account information to change user’s status, user’s role |
| 3 | Manage account | Search account | Display a list of accounts that contains keywords |
| 4 | Manage account | Delete account | Display confirmation message to delete an account in the system |
| 5 | Manage account | View account | Display account information |
| 6 | Manage account | Add account | Display pop-up form to add a new account into the system |
| 7 | Manage Personal Profile | Enrol Course | Display course has been enrolled |
| 8 | Manage Personal Profile | View Courses learned | Display course that has been fully learned |
| 9 | Manage Personal Profile | View progress | Display user’s learning progress in each course |
| 10 | Manage Personal Profile | Update profile | Display form to change user information |
| 11 | Manage Personal Profile | Manage profile information | Display user's information to update |
| 12 | Manage lesson | Display results | Display score, number of questions students answered correctly |
| 13 | Manage lesson | Take quiz | Display questions according to student settings |
| 14 | Manage lesson | View lesson | Display lesson information |
| 15 | Manage lesson | Search lesson | Display a list of lessons that contains keywords |
| 16 | Manage lesson | Delete lesson | Display confirmation message to delete a lesson in the system |
| 17 | Manage lesson | Edit lesson | Display form to change lesson information |
| 18 | Manage lesson | Add lesson | Display pop-up form to add a new lesson into the system |
| 19 | Manage course | View course | Display course information |
| 20 | Manage course | Search course | Display a list of courses that contains keywords |
| 21 | Manage course | Delete course | Display confirmation message to delete a course in the system |
| 22 | Manage course | Update course | Display form to change course information |
| 23 | Manage course | Add course | Display pop-up form to add a new course into the system |
| 24 | Manage blog | View blog | Display blog information |
| 25 | Manage blog | Add blog | Display pop-up form to add a new blog into the system |
| 26 | Manage blog | Delete blog | Display confirmation message to delete a blog in the system |
| 27 | Manage blog | Update blog | Display form to change blog information |
| 28 | Manage blog | Search blog | Display a list of blogs that contains keywords |
| 29 | Common | Register | Register an account for a new user |
| 30 | Common | Login | Allow users to log in to use services |
| 31 | Common | Homepage | Main functionally page for user |
| 32 | Common | Forgot Password | Allow users to input email to receive forgot password link |
| 33 | Common | View blog | Everyone can see and interact blog such as comment but guest only can view blogs |
| 34 | Common | View course | Everyone can see and interact course such as comment but guest only can view courses |
| 35 | Common | View About | Display About (Everything need to know about the website) information |
| 36 | Common | View Contact | Display Contact information (social media, address, phone number) |

*Table 3: Screen description*

***3.2 System Functional Overview***

***3.1.a Admin***

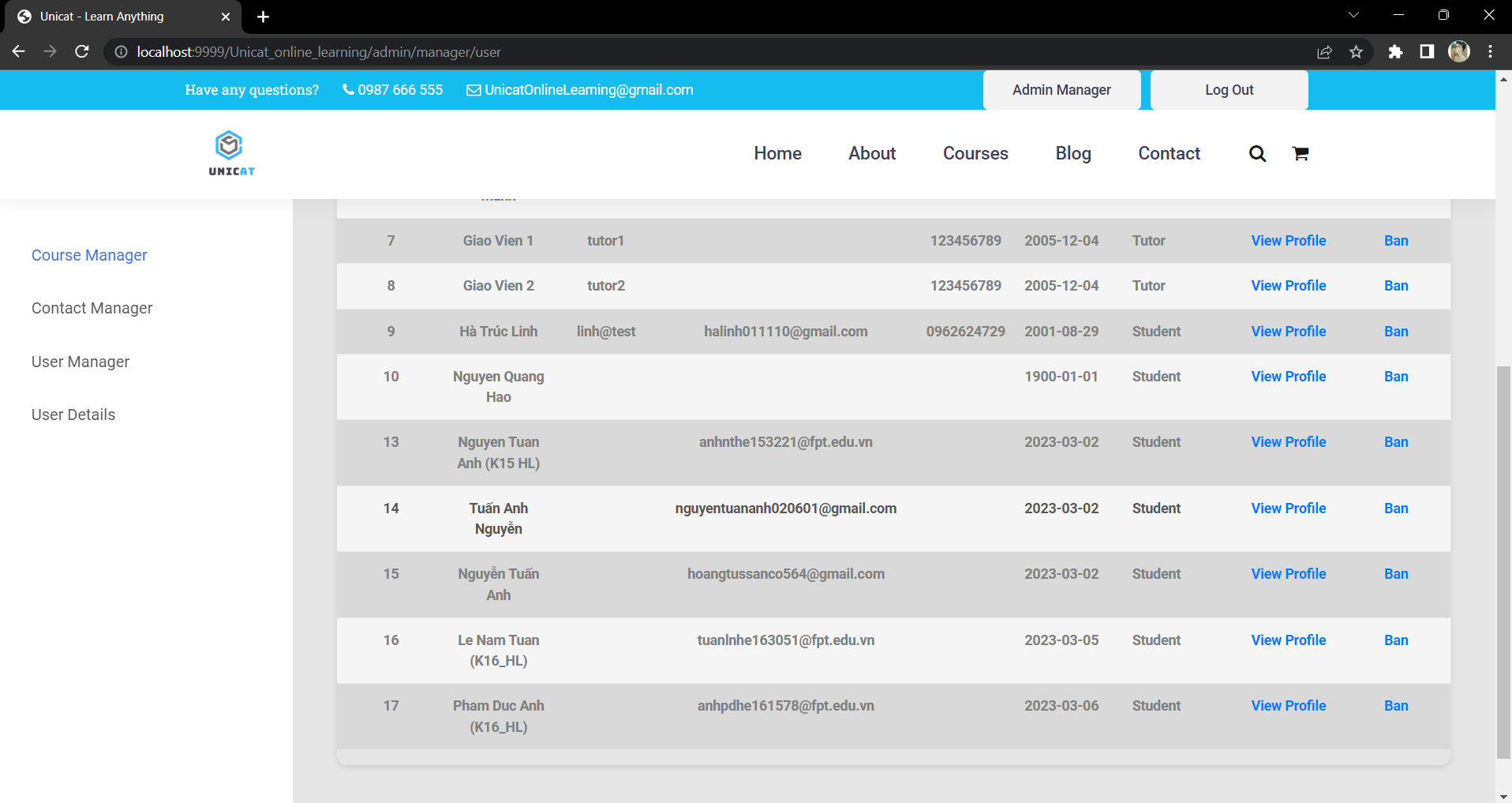
User Manager

Function Trigger: /admin/manager/user

Function description: This page is for admin to manage users like

display user information, search for users, view profiles of users, delete users.

* Search button: search username by id
* User Manager button: This button allows the admin to view the information. name, email address, date of birth and status of the person who registered for a unicat account
* View Profile Button: This page will display detailed information of the registered hero, including profile picture and personal information.
* Ban button: This button is used to delete registered users whose status is unclear

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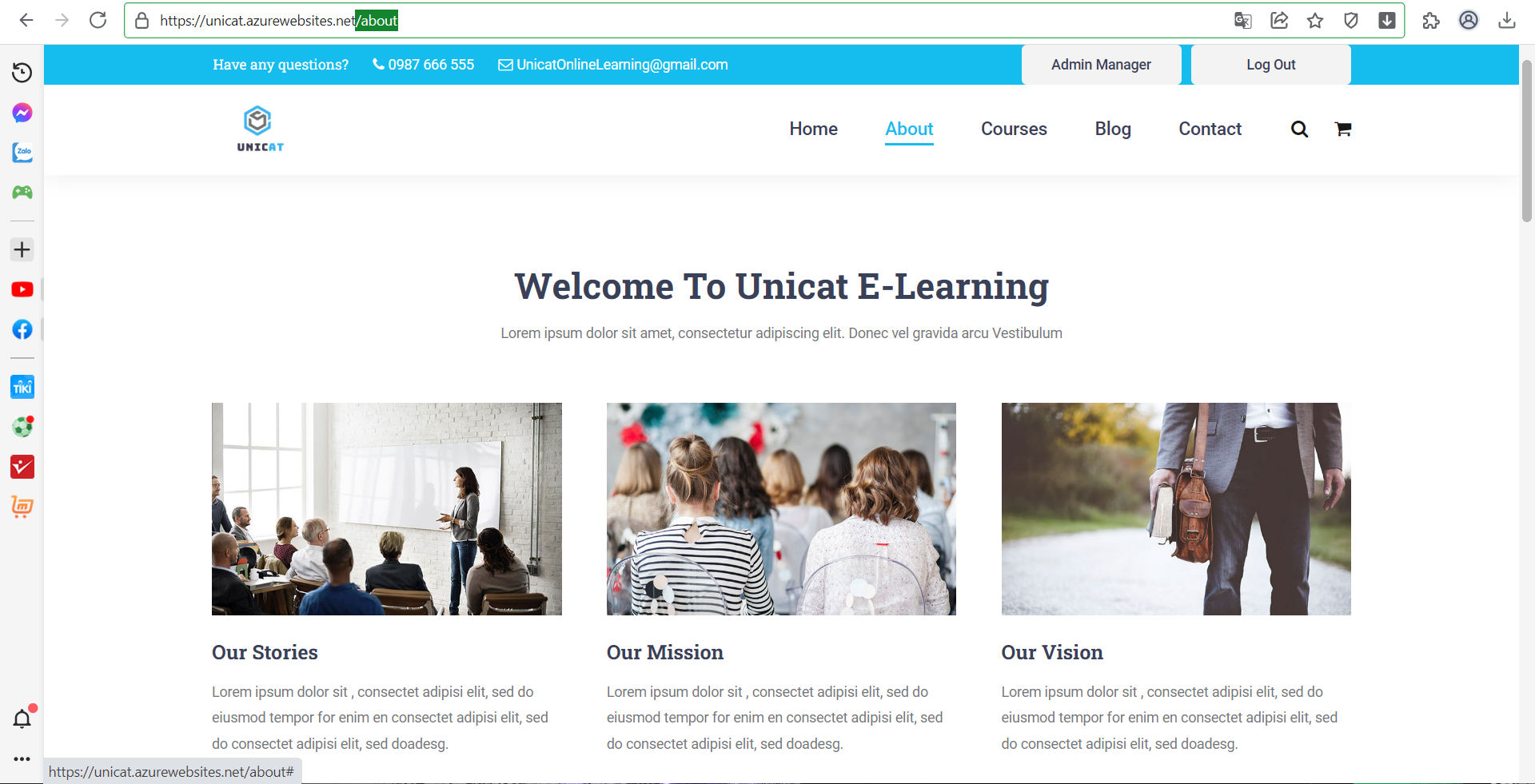
***3.1.c About***

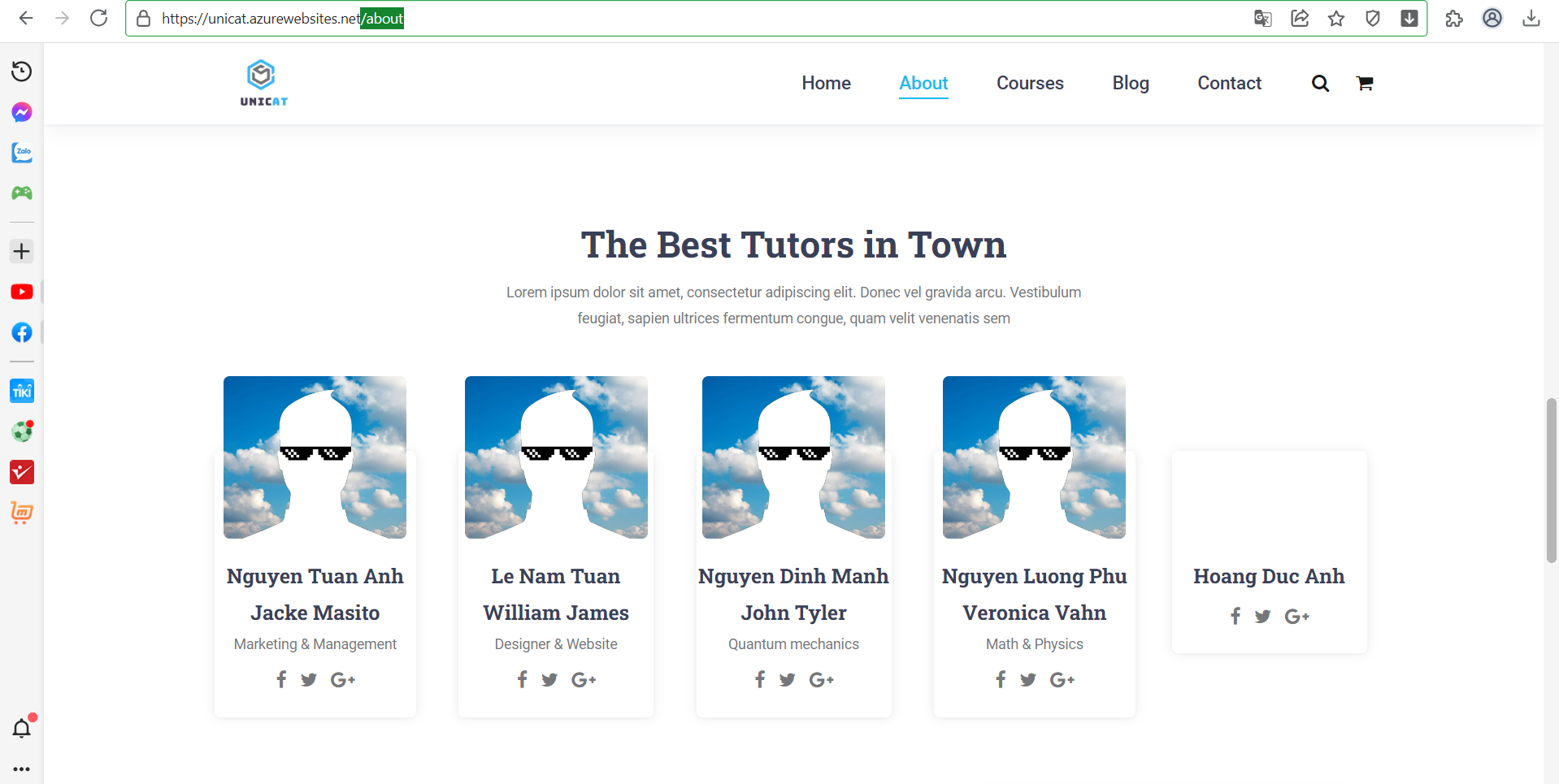
User Manager

Function Trigger: /about

Function description: this page helps users to see information, the story of the founder and how unicat was formed, direct information of the founders

* Our Stories button: this button to show the user the content of the story
* Our Mission button: this button to show users the value that the founder brings
* Our vision button : this button shows the user the developer's view
* facebook button: This button takes the user to their personal facebook link

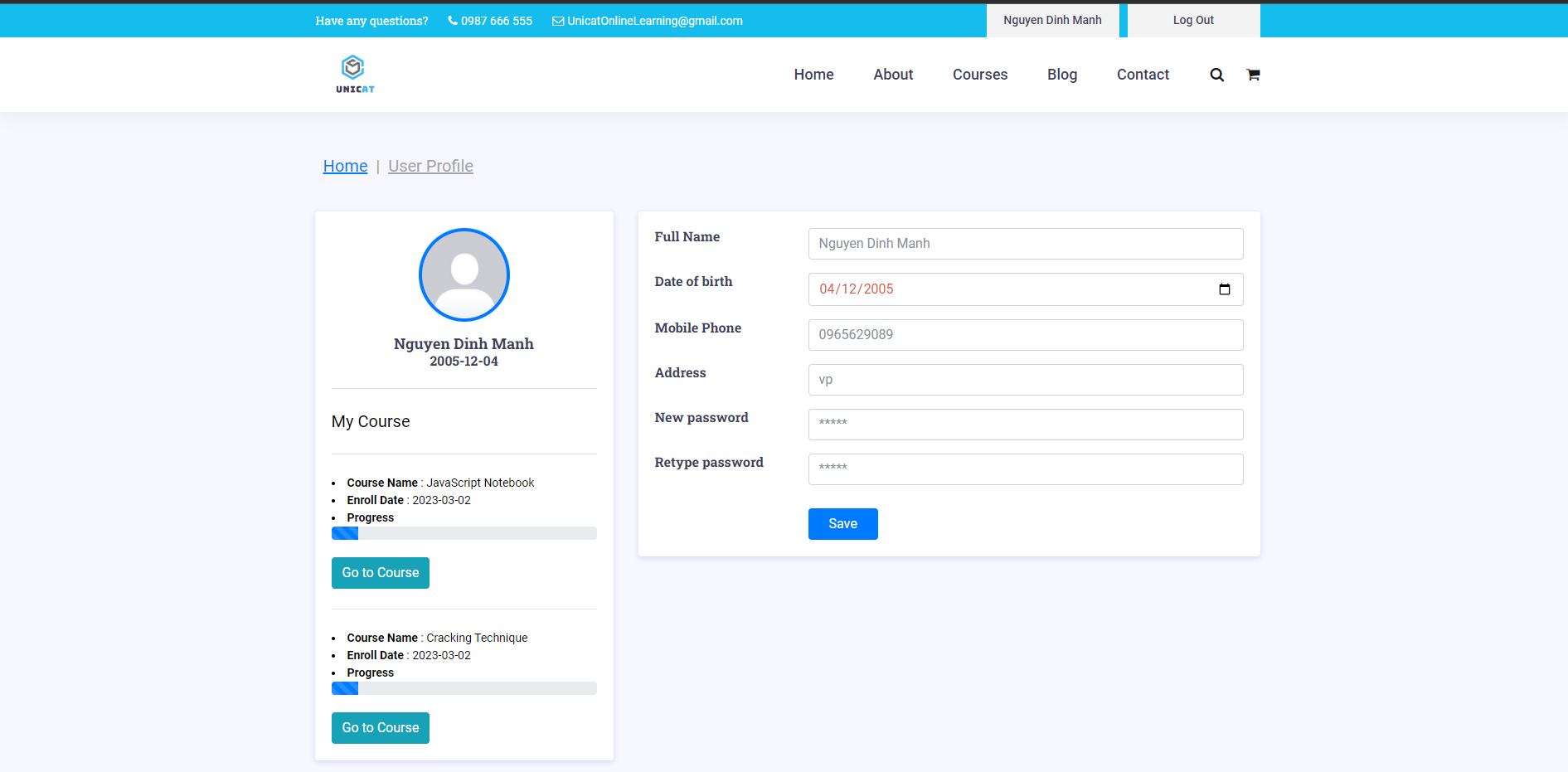




***3.1.b User Profile***

1. ***View Profile & Change user information***

* ***Function trigger: /userprofile***
* ***Function description : this page provides all current user’s information such as full name, avatar, date of birth, phone number, address and all current courses have done or in learning progress.*** 
  + ***Save button : this button will save change all information that you enter if it valid with rules of website.***
  + ***Go to courses button : Each course are in learning progress will show in the top of the My courses.***

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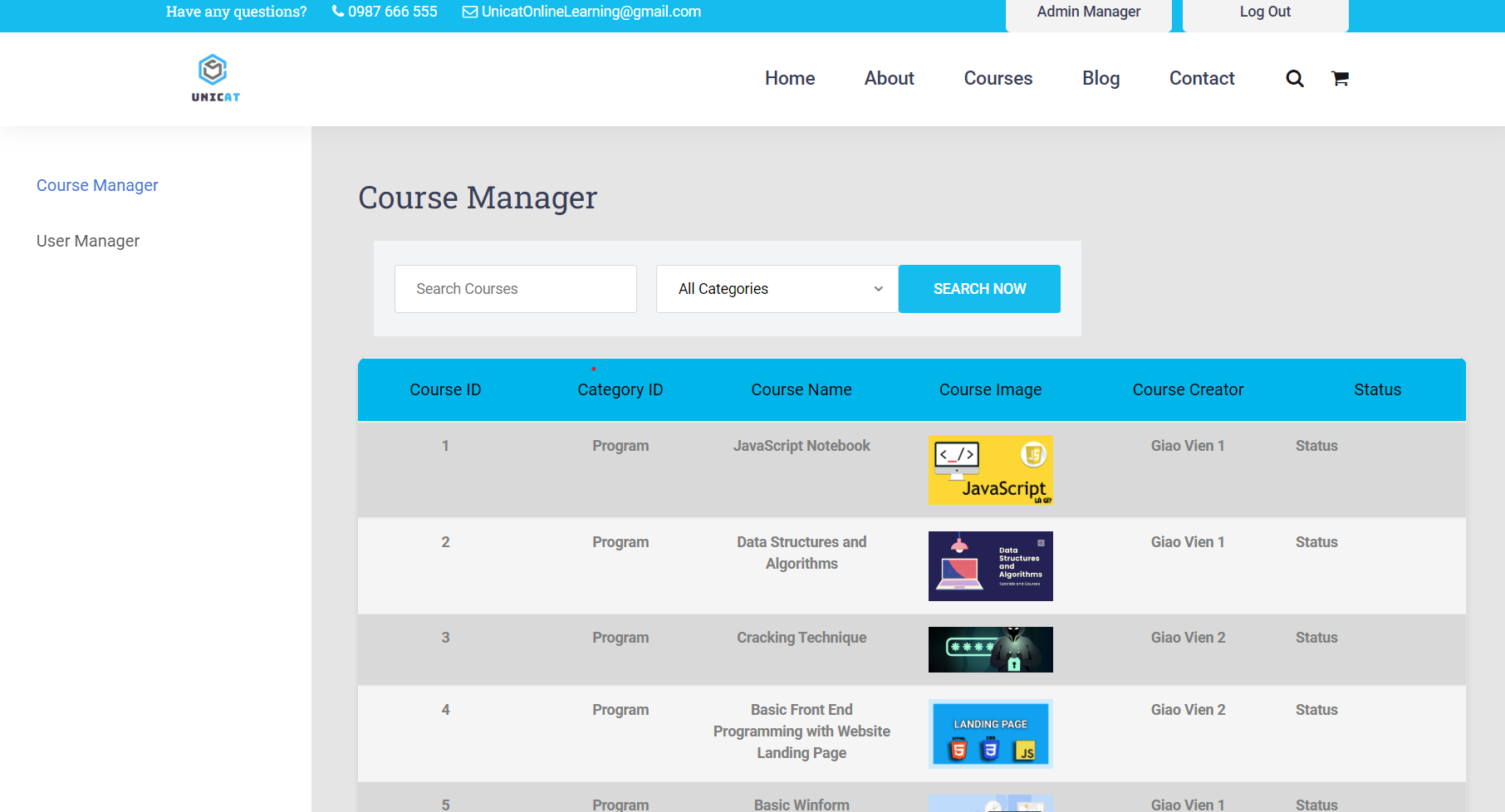
***3. Admin Manager***

1. ***Course Manager***

***⦁ Function trigger: /admin/manager***

***⦁ Function Description: This page provides service for the admin to manage all courses such as previewing course, search post by name or category, moderating a new course after tutor add it to the course list.***

* ***Search button: this button will filter courses by name or category.***
* ***Home button: This button will redirect admin to Home page.***
* ***Log out button: This button will redirect admin to home page and sign out admin’ s account.***
* ***About button: This button will redirect admin to About page.***
* ***Courses button: This button will redirect admin to Courses page.***
* ***Blog button: This button will redirect admin to Blog me page.***
* ***Admin Manager button: This button will redirect admin to Course Manager page.***
* ***User Manager button: This button will redirect admin to User Manager page.***
* ***icon Unicat button: This button will redirect admin to Home page.***



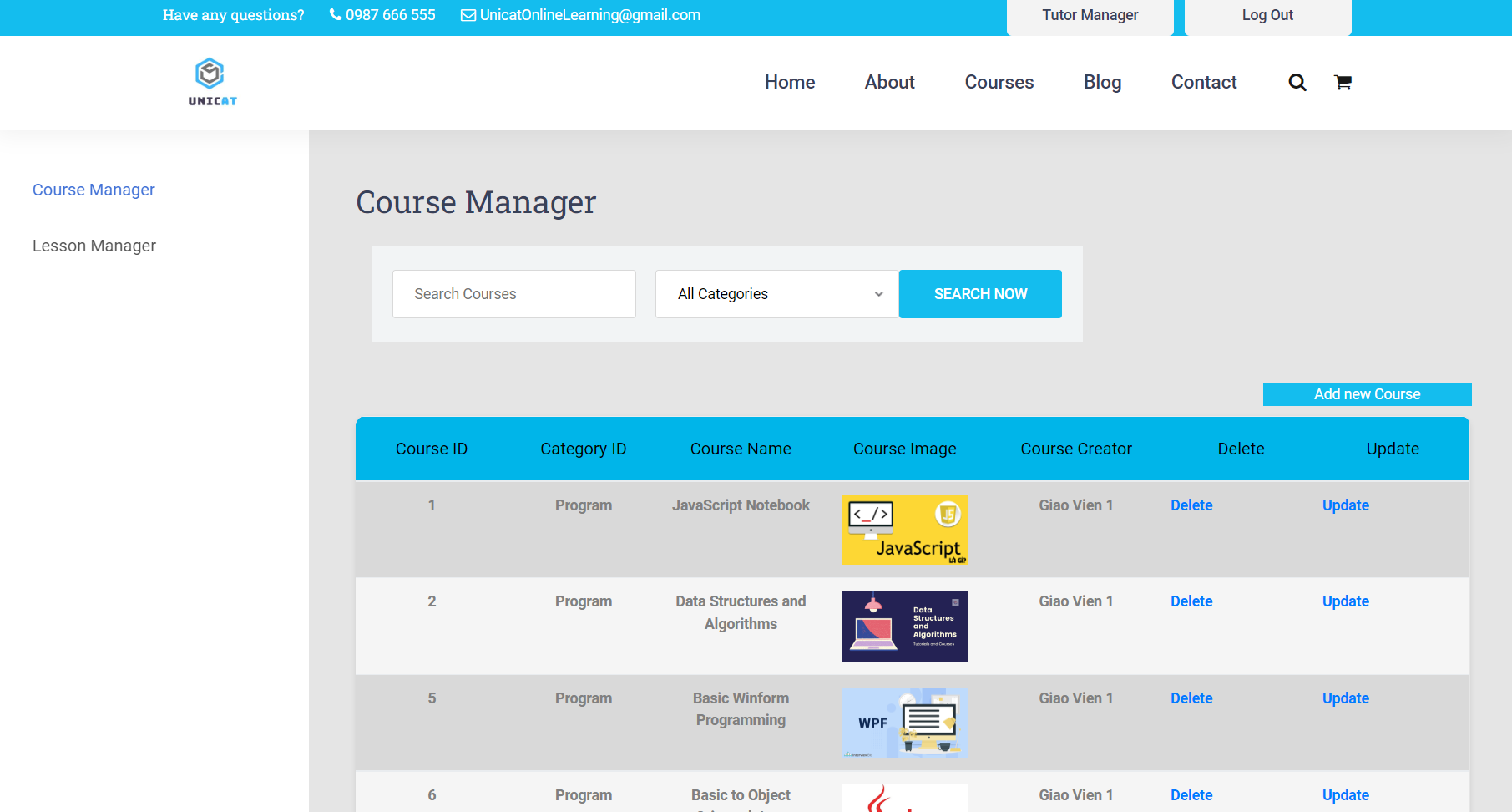
***4. Tutor Manager***

1. ***Course Manager***

***⦁ Function trigger: /tutor/manager***

***⦁ Function Description: This page provides service for the tutor to manage all tutor’s courses such as previewing course, search post by name or category, adding new course, deleting course and updating course.***

* ***Search button: this button will filter courses by name or category.***
* ***Home button: This button will redirect tutor to Home page.***
* ***Log out button: This button will redirect tutor to home page and sign out tutor’ s account.***
* ***About button: This button will redirect tutor to About page.***
* ***Courses button: This button will redirect tutor to Courses page.***
* ***Blog button: This button will redirect tutor to Blog me page.***
* ***TutorManager button: This button will redirect tutor to Course Manager page.***
* ***Lesson Manager button: This button will redirect tutor to Lesson Manager page.***
* ***icon Unicat button: This button will redirect tutor to Home page.***
* ***Add new Course button: This button will redirect to Add Course page.***
* ***Delete button: This button will redirect to delete selected course.***
* ***Update button: This button will redirect to Update Course page.***

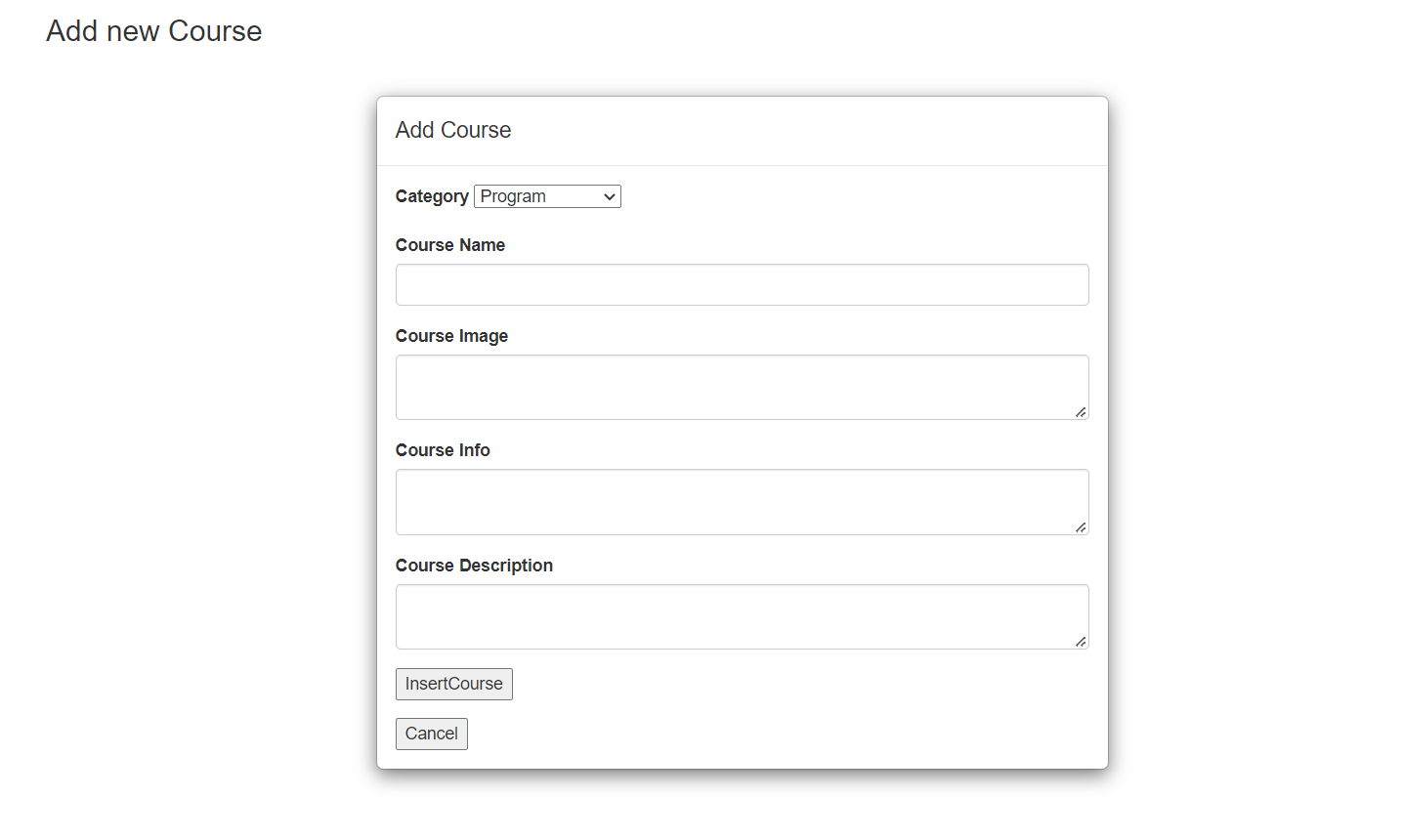
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1. ***Add Course***

***⦁ Function trigger: /tutor/manager/add***

***⦁ Function Description: This page provides service for the tutor to create new course to move to the course list.***

* ***Category button: this button will filter category name.***
* ***Course Name fill box: This fill box use to enter course name .***
* ***Course Image fill box: This fill box use to enter link of course image .***
* ***Course Info fill box: This fill box use to enter course information.***
* ***Course Description fill box: This fill box use to enter the details of course.***
* ***Insert Course button: This button will submit new course to the course list.***
* ***cancel button: This button will redirect tutor to Course Manager page.***

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