**System Analysis**

1. **Description of the information system**

The aim of this E Tutorial application is to effectively promote student learning and increase student knowledge in specific subjects and topics through targeted components detailed in each lesson module. It aids in increasing advanced computing skills such as HTML, PHP, CSS, Javascript, SQL.

* 1. **Block Diagram**

Progress Check

Tutorials

Authentication& Session check

User Stats

Login

User Dashboard

Username

Password

Register

Username, Password, Email

* 1. **System Processes**

1. **Login-** This module will provide login for admin and the registered members.
2. **Registration –**This module will provide new users to register into the website.
3. **Password reset –** This module will help the user to reset his/her password
4. **Dashboard** – This module allows user to manage there Progress, can begin tutorials, can see their awards
   1. **Input & Output Specifications**

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| --- | --- | --- |
| **Process** | **Input** | **Output** |
| **Login** | Login Details | Login Successful and homepage |
| **Registration** | User’s Details | Registration Successful and homepage |
| **Dashboard** | Progress Details | User course progress chart |
| **Tutorials** | Tutorial Progress | Specific tutorial progress chart, Begin / Continue tutorial depending on the Progress |
| **Awards** | Award Details | Tutorial Completion award if Any tutorial progress is 100% |
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* 1. **Data Elements Included in Input/output**

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| --- | --- |
| **Input/output Name** | **Data Element** |
| Login Details | User ID & Password |
| User’s Details | Username, Email Id, Password, Confirm Password. |
| Progress Details | **Input:** Session Username. **Output :** User progress variable |
| Tutorial Progress | **Input:** Session Username. **Output :** User’s selected Tutorial variable |
| Awards | Session Username **Output :** User’s selected Tutorial variable value |

* 1. **Identification Of Mathematical Procedures Used For Converting Input into Output**

User’s Progress chart calculation done by Multiplying the ‘pageStep’ variable by 10.