



## ONLINE COACH

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**Abstract— This paper analyzes users in which topic they are weak. Enhancing the effectiveness of web-based education has become one of the most important concerns within both educational engineering and information system fields. There are many online examination or e-learning systems available. In this paper, we propose a system of online coach for those students who want to self-tests and improve more on that particular topic. Any IT related user interested can use tests and self-tests for language revising and practicing. The course would be a summary of study materials being able to update and adjust to student's knowledge. The aim of the device is to develop their personal skills in the subject in which he/she is weak. Tests aim at checks user performance. If the result is poor then he/she have to read first tutorials and give again test on it and if they pass then test level is get hard for them. There is a timer for every test on particular topic of subject. Students get teaching material or tutorials presented in the form, which is quite different from the way that is common in the face-to-face teaching. Online coach aims to analyze user's knowledge in particular topic.**

**Index Terms— Topic, Test, Result, Tutorial**

### I. INTRODUCTION

The development of information technologies has contributed to the growth in e-learning as an

important education method. This learning environment enables learners to participate in 'any time, any place' personalized training [2]. In online coach user should first register into the system and then give test on any particular subject's topic for self-tests and check their knowledge after that if result is poor then tutorials related to that topic are sent on their email address and they have to read that tutorial and give again test on it then if result is pass then test level get hard for them. If user will crack all the levels for any subject then there is a master level which contains all the questions from those levels of that subject and user will be able to crack that master level. There is another important approach is timer. There is timer for each and every test and user should complete their test within timer.

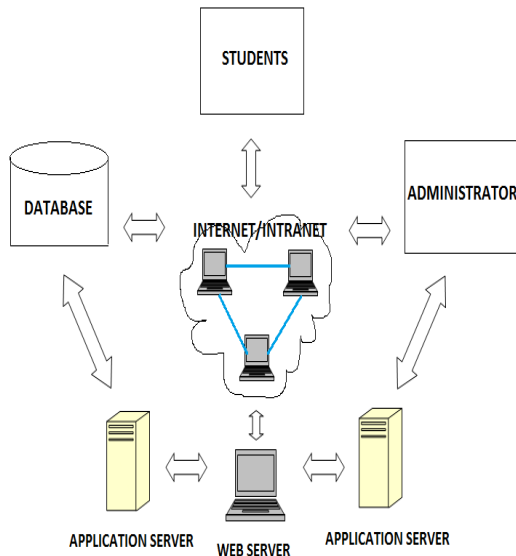
Any diploma or engineering user interested can use tests and self-tests for language revising and practicing. It should support student's motivation for study and make possible the checking of their own study results [2]. To develop their personal skills in the subject in which he/she is weak [2]. Course participants are supposed to take part in tutorials [2]. **Tests aim at check user's performance.**

The structure of the system allows interacting without installing any software on client side. To access the system a browser is only required [2]. Using this approach is a standard in online coach system because it allows to access remotely by just using web browser: reliable and stable work

via internet without such risks as dependencies from installing additional software on client side [1].

The study program for distance education has the basic elements: test and tutorials for study. This is consistent with the user's needs. The easier orientation of the tutorials is in PDF format. Explanations have to be ordered in an intelligible way, distinctly and clearly. Each paragraph has to contain one single idea only; the chapters might be further divided. Online programs present knowledge usually by means of modules. A module can be easily updated. The ease depends on the type of used materials. It is possible to incorporate newly emerging resources into online coach and to meet students' needs in this way very promptly.

## II. OVERVIEW



**Fig. 1 Overview of online coach**

Online web based system is based on the internet solutions. This is the most promising technology in distance education, allowing access to the system for students in any level: local or enterprise [2].

In internet technology different methods can be used for study: online tutorials read with predefined access and privileges in the system.

**The online coach system allows the following:**

- Test student's knowledge on certain topics in any convenient time for both sides by using tests.
- Keep and review test results in one central place on a server and to use them for educational grades.

- Easy extend, update or even introduce new study topic at any time during the online coach.

**The system allows to use the following online coach approaches:**

- Access to the online coach via internet access.
- Distribution of subject content.
- Testing of the students performance.
- Keep in the system study material.
- Creation educational courses according to study plan.

The admin can easily modify all the study materials and examination tests. This solution is for distance education services- small portals with online coach. The system is easy to use and allows users to learn all necessary materials online.

The content can be different: it can be a university course or private course for students all around the world. The local network allows creating educational network easily. Also the system allows using this network to take online test or to register them from any pc.

**Advantages:**

1. Easily customized and easily deployed solution.
2. The solution can be quickly adjusted to any design.
3. User friendliness.
4. Easy to understand.
5. It provides well security.
6. This system varies in size, scope and capability.

## III. SYSTEM ARCHITECTURE

### A. Admin

In fig. 2 admin stores tutorials, test papers and performs operations like add, delete, update etc on the test papers and tutorials. Admin can add new topics in subjects and also add new subjects on which users can give test and also add different levels for the test. Admin knows about which user is weak in which topic by analyzing the test result. All the result are store on server machine.

### B. Users

Users are first register themselves into the system. After that they login into system. User select subject and choose level 1 and then select particular topic of that subject on which they want to give test. There is a timer for each test within that they have to complete test. They can read tutorials and again attempt test. On the basis of result they can move further test or give again same test until they clear it or pass that test.

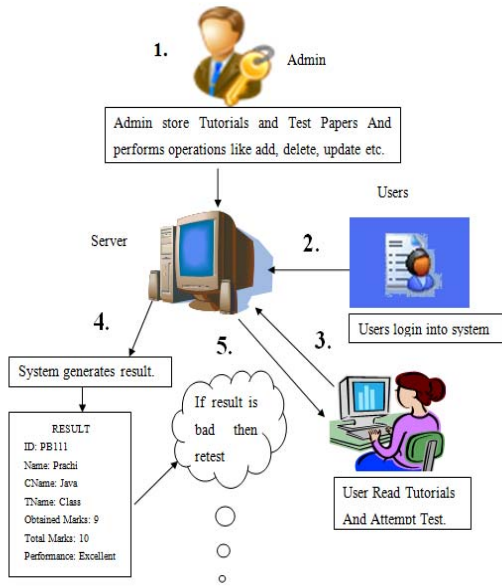


Fig. 2 System Architecture

C. System generates result

After given test by user the result is generated in that name of the user id, user name, subject name, topic name, obtained marks, total marks, performance in this format generated and if the result is good or pass then user will go in next level which get hard and attempt test on it. If the result is bad then the tutorials related to the subject’s particular topic are sent on their mail. And user has to read that tutorials and again give test on same topic and after if they pass then and then only they can give test on next level.

IV. SYSTEM IMPLEMENTATION

In system implementation we first design forms for GUI purpose. In that first form is homepage of the system on that registration for new user link is available and user can login in the system on same page by using user id and password after registration. If any user wants to register it then he/she click on link of register

new user. So the purpose of user registration we required user registration form for storing data.

If user enters user id and password for login into system then system access the database of user registration and verifies the user name and password. If user name and password is correct then login into system otherwise stay on same page and display the message user name or password incorrect. The main module of system is profile page of user on that page **test, tutorial, result** are sub modules.

In online coach there are **two levels and one master level**. When any user select subject there is level 1 and attempt test on particular topic and if he/she clear that level then they will go to next level which is get hard for them. After clearing these level there is one master level in which all the questions from the above levels are included and the user will have to crack this master level. After attempting test the result gets generated. User can view there result. If result is bad then the **tutorials** are sent onto the user’s email and he/she has to read or download that tutorial and attempt again test on the same until he/she will clear that level then and only then he/she go to next level. Online coach analyzes the students’ weak point and helps them to improve that point by giving tutorials. User can also read tutorials online.

Server side requirements:

1. Java
2. My Sql
3. Java Server pages(JSP)
4. Apache tomcat

Client side requirements:

In client side only browser is required through which user can attempt test and improve them.

V. ATTEMPT TEST

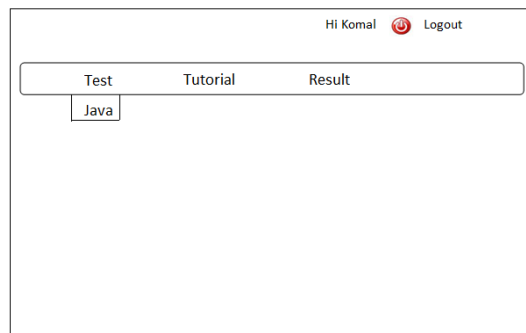
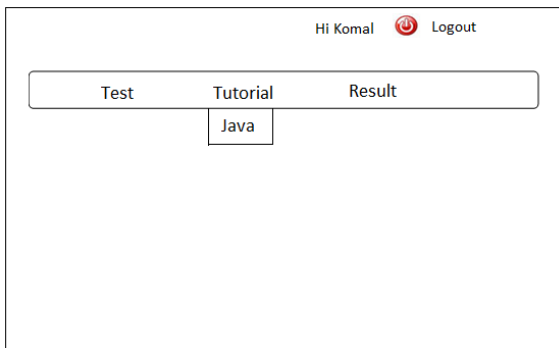


Fig. 3 Attempt Test

In this user can first login into the system by using their user id and password. After that there is profile page on which test module link is present. Then user will click on that link on which there are name of the different subjects and user will choose any one subject by clicking on it. Selecting subject is the users' choice on which they attempt test. After selecting subject there are number of topics available in that particular subject.

In that **there are levels**. User should select level 1 and after that there are number of topics are display related to that subject and user should choose particular topic that they want to test. When user first time giving test then only level 1 is focused and level 2 is unfocused and after passing level 1 the next level get focused. In that tests subject wise, different questions are asked for the different times that means questions are not asked repeatedly. **All the questions are randomly display**. For test purpose we make new database for questions and answers. There is question and for that four answer options among which one is correct. There is a **timer** for attempting test. If time is up the test will be stopped and till how many questions were attempted by user only for that result is generate. After attempting test result gets generated and user will know about his/her knowledge about that particular topic and help them for improve on it more.

**VI. READ TUTORIALS**



**Fig. 4 Read Tutorials**

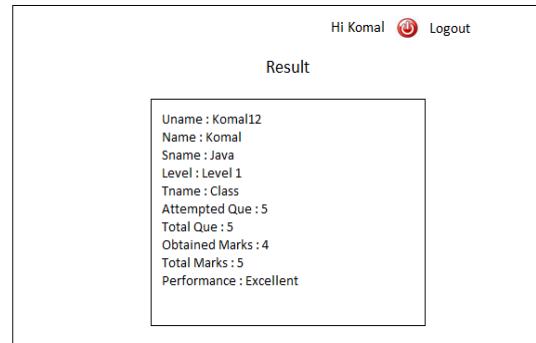
User can read tutorials online also. And for that purpose they first logon to the system. There is link of tutorial on profile page by clicking on that there are different subjects and user should select any subject. And in that subject there are number of different topics.

User will select any topic and in that there are

different chapters related to that topic. User will open that chapter which is in **PDF** form and read it. These PDF format chapters will help user to improve their knowledge and they give again test and crack that test. There are levels in test so that tutorials are also available level wise. That means for any subject there are levels and for that levels different topics are there, likewise for each level different topics tutorials are there.

If any user fail in test then the tutorials related to that topic send on user's email and then user download that tutorial, study it and give again test. We give the topic name and subtopics as a index. After clicking on any subtopic page link is opened. For the designing purpose we used the **scripting language**.

**VII. VIEW RESULT**

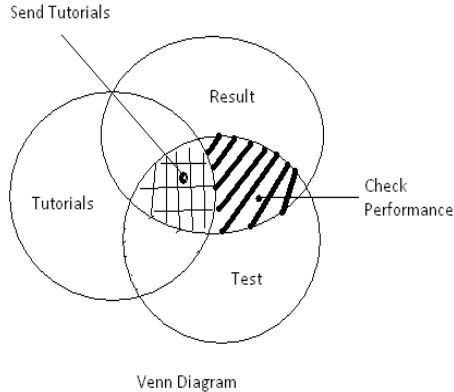


**Fig. 5 View Result**

It shows the test result according to the test performance. After attempting test the result generated. User click on result link and see their result in which user name, name of user, subject name, level, topic name, attempted questions, total questions, obtained marks, total marks, performance of user get displayed.

**If user's result is fail then the tutorials related to that topic of subject are send on user's email.** And user read that tutorial and then again attempt test and pass that test and after passing move forward to next level. Next level is disappeared till first level get crack by user. In every test timer is available if the timer is up test will be stopped and only for attempted questions result were generate. Result is the most important approach of online coach by analyzing the result system will know that which user is weak in which topic and help them to improve on that topic. The analysis of result is in

diagrammatic form stored in the system.



**Fig. 6 Venn diagram**

In above Venn diagram there is brief description of the online coach system. In above fig.6 the students' performance is check that means excellent, good or poor. Based on user's performance they can reach next level or read tutorials and again give test until they pass. The main purpose of system is play roles like physical teacher means analyzed the user's weakness and provide guidelines to which topics required for preparation.

### VIII. APPLICATIONS

1. Attempt tests module is used in the online tests, example, GATE, University online exam.
2. Registration module is used in any management system for user registration, like attendance management system.
3. Read tutorials is used in e-learning system, like tutorials point website.
4. Analysis of weak topics according to the result performance in system jeevan sanjivani for personality development.

### IX. FUTURE SCOPE

In future we can add new courses in the online coach system. We can also give guidelines for writing resume, writing application letters or any new technology launched. We can also provide guidelines for computer language programs how to write like for c, c++, java, python, php, Perl etc. We can add tests on these and also provide tutorials for this. We can also give knowledge about different databases and cloud computing

information and tests the users' knowledge about these and new technologies.

### X. CONCLUSION

For most students the online coach serves as complementary one. We consider as a big contribution the fact that a student is able to check the level of his/her knowledge continuously and comparatively exactly.

A student gets through a course according to his/her needs. User devotes as much time to the learning as they needs, they chooses the speed of learning the course type and form. User can revise the learnt subject matter and check them acquired knowledge whenever they wants to. We can help user to overcome their weaknesses of topic. Also user will get all data at one place.

### REFERENCES

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