**CHAPTER 2**

**2.1 State of The Art**

In the writing of this thesis, the authors pick three different journals that have similarities to this project in order to determine the system-standard based on the latest invention. These really help in inspiring the authors to create a better system.

|  |  |
| --- | --- |
| **Journal Title** | **Description** |
| ***E-Learning System to Enhance Cognitive Skills for Learners in Higher Education***  **Writer**  Noawanit Songkram, Jintavee Khlaisang, Bundit Puthaseranee, Maneerat Likhitdamrongkiat  **Location**  Sakarya, Turkey  **Year**  2015  **Journal Name**  *Procedia - Social and Behavioral Sciences* | The journal is about a newly-developed e-learning system that was tested at three major disciplines including: health science, science and technology, and social science and humanities. The subjects are 240 higher education students and they were offered with many digital contents such as e-books and streaming videos to learn for a couple of weeks. The result is quite satisfying as they claimed that the flexibility aspect in e-learning system ease them to think more creatively. This result inspired the authors to maximize the system by including the support of videos and other external sources. |
| ***E-Learning Sebagai Media Pembelajaran Interaktif Berbasis Teknologi Informasi***  **Writer**  Mohammad Yazdi  **Location**  Palu, Indonesia  **Year**  2012  **Journal Name**  *Jurnal Ilmiah Forsitek* | Mohammad Yazdi as the author of this journal created a similar system to what contained in this thesis. Except it was a much smaller system that covers only one course subject which is Islamic Education. The great plus of the system is that it has a real-time chatting feature. The result showed that the new e-learning system managed to create an interactive ambient and good communication between student and teacher. This result encouraged the authors to develop a better system in the near future. |
| ***Effectiveness of interactive e-learning organization and quality assurance in European interuniversity master studies***  **Writer**  Rita Birzina, Daiga Kalnina, Jelena Janevica, Emilija Cernova  **Location**  Latvia  **Year**  2009 **Journal Name**  *Educational Effectiveness and Quality Assurance* | Twenty-one students of Master Program in University of Latvia were offered to study their subjects in 3 different methods including e-learning. The study revealed that the use of e-learning in the studies is effective if it provides student's personal experience and social recognition as conditions for creation of new knowledge, students' competencies and learning outcomes. Despite of that, most of the students had a difficulty at beginning of using the application due to their lack of IT skills. This encouraged the authors to design a user-friendly system. |

**CHAPTER 4**

**Page 125**

1. Web Server, with expected software as shown below :
2. Operation System : Windows XP
3. Web Server Application : Apache/ 2.2.29
4. PHP Version : PHP 5.4.41.
5. Database : MySQL 5.5.42-cll
6. Client, with expected software as shown below :
7. Operation System : Windows XP
8. Internet Browser : Google Chrome or Mozilla Firefox

**Page 132**

View Login Page shown in Figure 4.8

**Page 133**

Reset Password shown in Figure 4.9

**Page 134**

View Profile shown in Figure 4.10

**Page 135-136**

Course shown in Figure 4.11

Course -> Course Name -> Reading Material shown in Figure 4.12

Course -> Course Name -> Supporting Material shown in Figure 4.13

**Page 137-141**

Forum shown in Figure 4.14

Forum -> Post Thread shown in Figure 4.14

Forum -> Post Thread -> Post Question shown in Figure 4.14

Forum -> View Thread shown in Figure 4.15

Forum -> View Thread -> Math shown in Figure 4.16

Forum -> View Thread -> Math -> Title shown in Figure 4.17

Forum -> View Thread -> Math -> Title -> Post Comment shown in Figure 4.18

Figure 4.14 Actual Result for Selecting Forum Menu

# Figure 4.15 Actual Result for Selecting View Subject

# Figure 4.16 Actual Result for Selecting View Forum

# Figure 4.17 Actual Result for Selecting Forum Detail.

# Figure 4.18 Actual Result for Reply.

**Page 142-145**

Assignment shown in Figure 4.19

Assignment -> View Assignment shown in Figure 4.19

Assignment -> View Assignment -> Math shown in Figure 4.20

Assignment -> View Assignment -> Math -> Title shown in Figure 4.21

Assignment -> View Assignment -> Math -> Title -> Submit Answer(s) shown in Figure 4.22.

# Figure 4.19 Actual Result for Selecting View Assignment.

# Figure 4.20 Actual Result of Selecting View/Assignment/Title.

**Page 146**

Admin Login Page shown in Figure 4.23

Admin Home Page shown in Figure 4.24

Admin Change Password shown in Figure 4.25

**Page 148-149**

Insert Student shown in Figure 4.26

User List shown in Figure 4.27

Edit User -> Search user shown in Figure 4.28

Edit User -> Searched User -> Edit shown in Figure 4.29

**Page 152-153**

Insert Class shown in Figure 4.31

Class List shown in Figure 4.32

Edit Class -> Search Class shown in Figure 4.33

Edit Class -> Searched Class -> Edit shown in Figure 4.34

**Page 156-157**

Edit Thread -> Search Thread Poster shown in Figure 4.36

Edit Thread -> Searched Poster-> View Thread List shown in Figure 4.37

Edit Thread -> Searched Poster-> View Thread List -> Edit shown in Figure 4.38

Thread List shown in Figure 4.39

Delete Thread shown in Figure 4.40

**Page 160-161**

Insert Assignment shown in Figure 4.41

Assignment List shown in Figure 4.42

**Page 162-163**

Insert Material shown in Figure 4.43

Material List shown in Figure 4.44

**Page 164**

1. Strive for consistency -> front-end light-blue, back-end orange