TEST ENGINE SYSTEM

(TES)

USER INTERFACE SPECIFICATION

April 15, 2003

Version 1.0

Team Members

User Interface Requirements

This document presents the user requirements for thel User Interface (UI), one of the software components of the TestEngine system. The document describes functional capabilities related to screen design and navigation as well as responses to user initiated events. The Test Engine interface will be intuitive and easy-to-use. It will be designed to take advantage of existing user-interface guidelines which will facilitate navigation throughout the system. The idea behind the proposed user interface is to provide a graphical tool for taking an exam online
Since processing requirements are limited the Model 1 architecture will be a useful construct.

Designing the user interface (UI)

I-UI-001   The system shall provide a easy-to-use graphical user interface including icons, pull-down menus, buttons, and hyperlinks as appropriate.

I-UI-002   The system should adhere to commonly accepted user interface guidelines on windowing systems. Ex: a button should perform like a button and not like a checkbox.

I-UI-003   The system shall provide a web-based interface.

Definition of Users:

- Students who employ TestEngine to take online exams or preparatory tests.
- Teachers who employ TestEngine to prepare online tests and keep additional student performance data.

User Actions:

Students will use TestEngine to take practice tests or real exams . Input options include:

- Type text into a box
- Action buttons for "Next" and to navigate within various screens
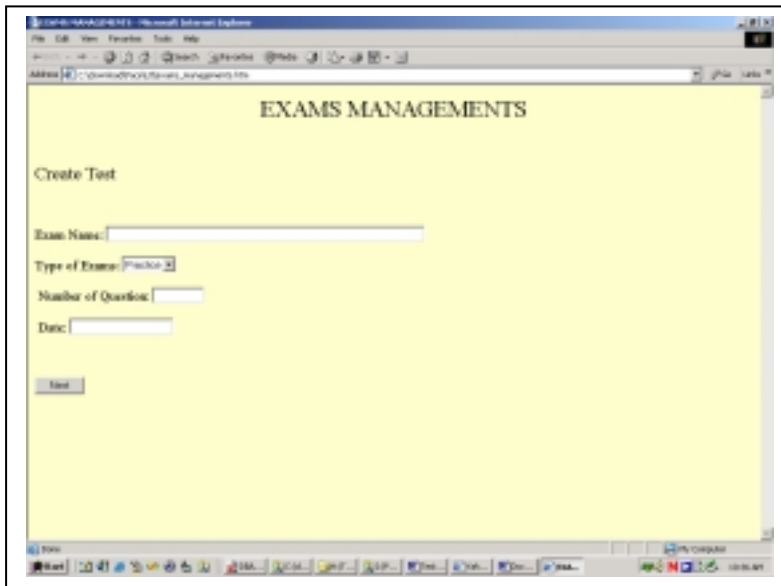- Check boxes or radio buttons

User Interface Description

This section will describe each user interface. It will go through the exact action each button should perform.

Administrator User Interfaces

Exam Management

The exam management screen should provide functionalities for entering exam name, type of the exam, number of questions and a link for going to the next screen for entering questions

Title

Exam Management

Description

Allows the exam administrator the ability to enter a new exam into the system.

User Fields

Exam Name: Enter a name for the new exam. For example, mid-term exam.
Type of Exam: Select a type of exam from the dropdown combobox. Example values are: Practice and Real. A students' answers will not be saved until the exam is 'real'.
Number of Questions: Enter the number of questions in the entered exam.
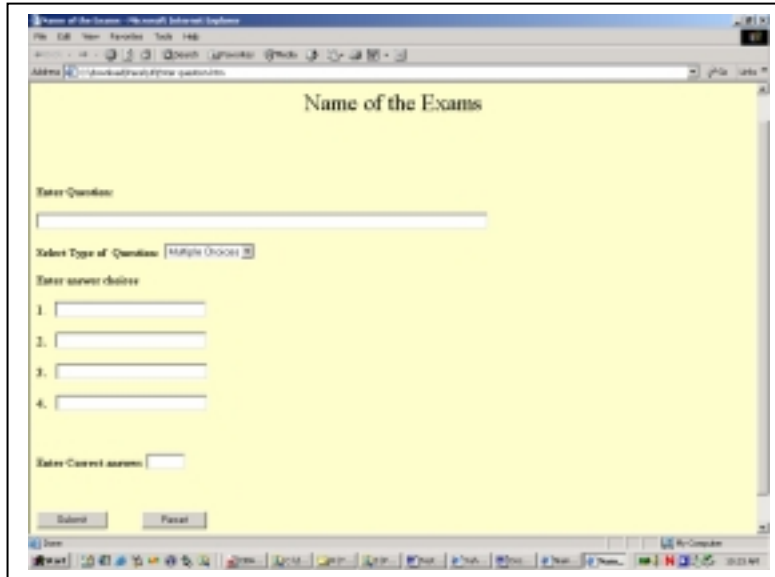Date: The date of the exam will be given.

Actions

Next: Clicking next will

Access to user interface

Administrative priviledge

Enter New Exam Question User Interface
The screen for entering the question should provide a field for entering the question content, four other fields for entering anser alternatives, and also a field for entering the correct answer.

Title
Enter new question

Description
Allows the test administrator the ability to enter a new question for a selected exam.

User Fields
Enter Question: Enter a new exam question.
Select Type of Question: Exam question type. Example values are: True/False, Multiple Choice.
Enter Answer Choices: Available responses to the entered exam question

Actions
Submit: Saves the exam question
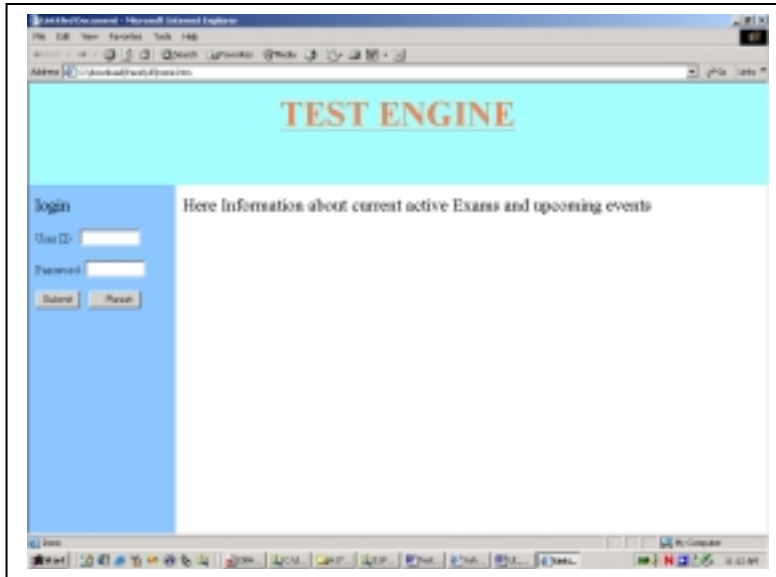Reset: Resets the form to blank values

Access to user interface
Administrative priviledge

End User User Interface

Exam Home Page

When the user types the sites url the main screen shows up This screen may contain various information in one separate frame and also a logon frame. After the logon the following screen consists of links which the user may select to take a practice test, a real exam, or go to reports and administration page.

Title
Test Engine Home Page

Description
User enters credentials into the username / password fields to be authenticated by the Test Engine system.

User Fields
User ID: Enter the user id assigned by the system administrator.
Password: Enter the password chosen by the Test Engine user.

Actions
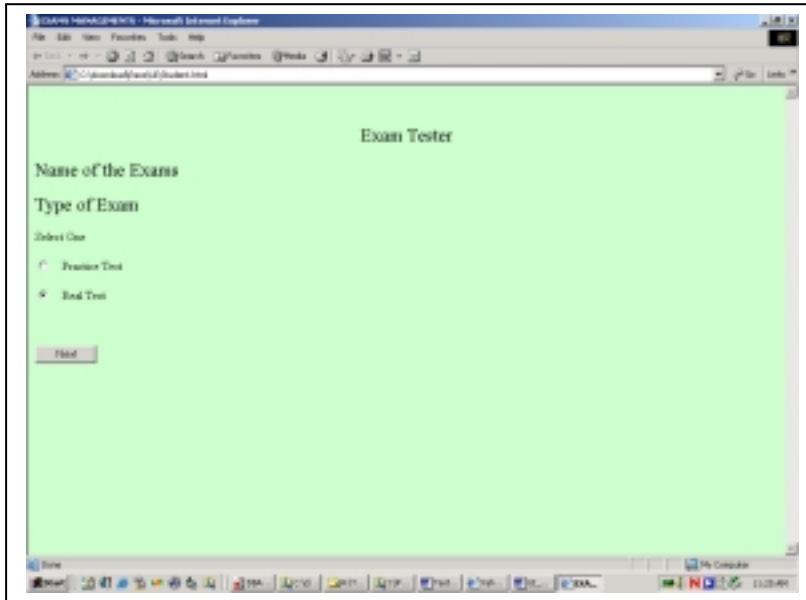Submit: Submits the credential information for authentication
Reset: Resets the form to blank values.

Access to user interface
User priviledge

Select Exam Type

After the logs on if the user is not a priviledged user the following screen shows up. This screen consists of links which the user may select to take a practice test, a real exam, or go to reports and administration page. If the user is a priviledged user the screen shows up also a link to the administration page.

Title
Select Exam Type to begin exam

Description
User selects the exam type when starting an exam.

User Fields
Exam Type: The user selects either practice or real to either practice an exam or take a real one. Displayed as a radio button so that the user is allowed to select only one value.
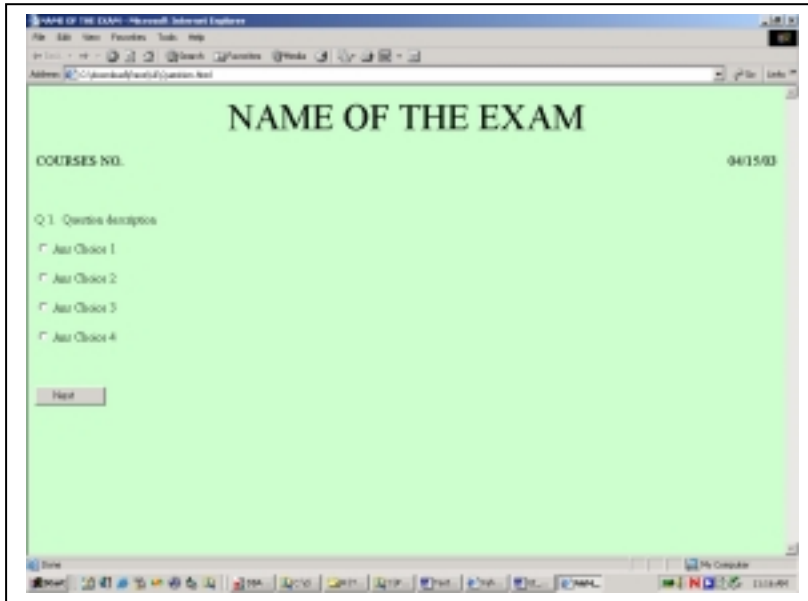
Actions
Next: Clicking next will take the user to the next screen which starts the exam.

Access to user interface
User priviledge

Exam Question Type #1

When student starts taking the test the test questions show up. The user interface shows the question together with answer alternatives. By clicking the button next the same screen (with a different question) shows up. After the last question the test taker can view the result of the test.

Title
Multiple choice exam question type.

Description
User is displayed with exam choices in multiple-choice format.

User Fields
Question: The question to be answered by the Test Engine user.
Answer: The response entered by the Test Engine user. The response choices are displayed as radio buttons so that the user is only allowed to select one choice.
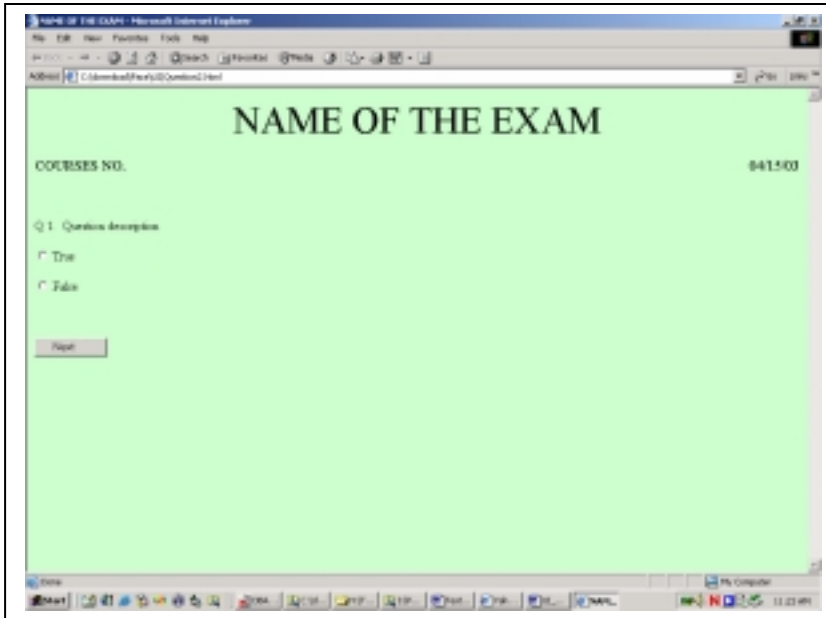
Actions
Submit: Submits the exam response information which is stored in the database.

Access to user interface
User priviledge

Exam Question Type #2
When the question type is a true false question the following screen shows up

Title
True / False exam question type.

Description
User is displayed with exam choices in True / False format.

User Fields
Question: The question to be answered by the Test Engine user.
Answer: The response entered by the Test Engine user. The response choices are displayed as radio buttons so that the user is only allowed to select one choice.

Actions
Submit: Submits the exam response information which is stored in the database.

Access to user interface
User priviledge