School Exam Management System (SEMS)

User Manual
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School Exam Management System (SEMS), by TestDriller, provides schools with the finest tools to organize computer based tests (CBT), manage students and staff records, process results, send report cards and do much more.

SEMS is designed for the 21st century schools willing to go paperless.

SEMS works offline. It runs on local server. Internet is required only when report cards are to be sent via SMS or email address.

SEMS has everything you need to manage a school exam.

On SEMS, you can manage student records, staff records, students result, organize CBT, send customize report cards and many more.
What You Get From SEMS

- Manage Student Records
- Manage Staff Records
- Work Offline
- Go CBT, Objective and Theory
- Allows Manual Result Recording
- Generate Customizable Report Cards
- Send Result Via SMS And Email
- View, Print And Export Result Sheet
- Allows Manual Result Recording
Components of SEMS

- **Xampp Server**: Makes your computer a local server. Houses the database and other vital applications.

- **Admin Portal**: This is where you provide the school data, upload test questions, monitor exam portal and more.

- **Exam Portal**: This is where students take CBT. Has excellent CBT engine for objective and theory exams.

- **Teachers Portal**: This is where teachers log in to input manual results, print results and report cards, and set current subject during CBT.

- **Student Capture Software**: Use webcam to take students photos and also collect other information with ease. (Not yet available.)

- **TestDriller Content Tool**: This helps you set questions in a CBT format.
### Setting Up SEMS

1. Download the entire software from [https://www.testdriller.com/sems](https://www.testdriller.com/sems)
2. Unzip the downloaded file. You should see the following inside:
   a. SEMSAdminPortal.exe
   b. SEMSExamPortal.exe
   c. TestDrillerContentTool.msi
   d. xampp-portable-package [folder]
   e. Templates [folder]
   f. DotNetFx40 [folder]
3. On the server computer open “xampp-portable-package” folder. You should see “xampp” folder inside it. Copy the xampp folder and paste it inside the C:\, i.e. the Local C Drive.
4. On the server computer, copy the SEMSAdminPortal.exe to the desktop or any location of your choice.
5. On the client computers, where exam will be taken, copy the SEMSExamPortal.exe to the desktop or any location of your choice.
6. Rename server computer to testcentre-pc. To rename a computer, go to System properties from “My Computer”. On the left side of the System properties, you will see Advanced system settings. Click on it. A dialog box will show up. Click on Computer Name tab. You will see a Change button. Click on it. You can then rename the computer. Note that this step is not necessary if you want to manually enter the server computer name or ip address on each client computer.
7. Install TestDrillerContentTool.msi on as many computer you want to use for setting questions.

Now you are ready to go paperless!
Connecting The Server With The Clients

- On the server computer, run the `xampp-control.exe`. To do this, go to your local disk C. Open the xampp folder you pasted. Find and run `xampp-control.exe`.

- Once `xampp-control.exe` is up, start Apache and MySql modules. Once they are started, minimize it. If it fails to start, install `vcredist_x86.exe` and kindly restart your computer. Always stop both modules and click on the Quit button when done. Avoid closing the xampp server while the modules are started. Also, avoid using the close button at the top right corner; instead use the Quit button.

- On the server computer, go to where you pasted `SEMSAdminPortal.exe`. Run it. If it fails to run due to a dotnet framework error, kindly install the dotnet framework application in `DotNetFx40` folder.

- Check if the Admin Portal software is connecting to the xampp server. If it is not connecting it will show an error message at certain interval.

- Ensure all the client computers are in the same network as the server. You can use wire or wireless network. In a situation where you have less than 10 client systems and all the systems have WiFi, you can use the Admin portal software to create hotspot on the server. To create hotspot, go to the Admin Portal. On the menu bar, click Wifi Hotspot -> Create New. A dialog box will show up. Enter the name and password and click on create. You can always turn it on and off via the Wifi Hotspot menu.
Connecting The Server With The Clients

- On any system in the network, check if you can access the Teachers Portal. Open an updated Chrome or Mozilla browser. On the url bar, type http://testcentre-pc:81/sems/. In case you did not change the computer name, replace testcentre-pc with the server computer name or IP address. If no connection is made, check if the xampp server modules are still started. Also check if the server network allows file sharing. You will need to turn on file sharing and turn off password protected sharing. To change these settings open Network and sharing center. On the left you will see Change advanced sharing settings. Click on it. Turn on network discovery and file sharing for all categories. But turn off password protected sharing. Save changes.

- On each client system, check if you can access the server by running the SEMSExamPortal.exe. If a dialog box pops up telling you to Provide IP or Connect, it means it could not find the server. Enter the IP address if you did not change the name of the server to testcentre-pc. If that fails again, it means that the client is not in the same network as the server. If successful, you will be asked to provide a unique computer number for that client so that you can easily identify it on your server. This computer numbering happens once.

- All clients running SEMSExamPortal.exe can be monitored on Admin Portal. Go to Monitor Exam Portals to view all connected clients. You can screenshot each client from the Admin Portal via the Capture button. Also, you can restart client computer, shut down, Log out ongoing exam, submit exam right from the Admin Portal.
Providing School And Server Settings

- Activate Admin Portal
- Set school name, address, logo and email address
- Add Academic Season, terms and report card template
- Register your server on testdriller.com
- Add Teachers
- Add Classrooms
- Add Students
- Add Subjects
Providing School And Server Settings

These are the steps the admin should take before SEMS will be suitable for a school.

1. The Admin Portal should be activated. You will need to buy an activation key. The activation key costs N2,000. This is a one-time fee. You can buy an activation key at https://www.testdriller.com/buy?pn=TESTCENTRE&pk=.

2. Change your **School Name, School Address, School Email Address** and **Access Code** (it is basically your password whenever your server needs to communicate with our online server) via **Settings -> Server Properties**. You can also change **Ping Interval**. Ping Interval is how long the Admin Portal and Exam Portals will wait before updating themselves if there are any updates. It must be between 3 and 60 seconds. Replace the default logo with your school logo. Go to **Settings -> Change Business Logo**.

3. Register the your on testdriller.com. You can do that by yourself or send your activation key and school details to us. To do that on your own, register at testdriller.com/register. After you must have logged in, go to **Test Centre->Server** menu (https://www.testdriller.com/users/test_centre_server). Click on the **Add** button, fill the server details and that’s all. Note that you will also use this account to buy license.
Providing School And Server Settings

4. Add teachers. To do that, click on Teachers then the Add button. Note that a temporary password will be created for the teacher. The teacher will be able to log in with their email address and password on the Teachers Portal. The teachers portal can be accessed via http://testcentre-pc:81/sems/ on any computer in the network.

5. Add subjects. To do that, click on Subjects then the Add button. You will be asked to provide subject name, content name and subject teachers. The content name is the name you will use when setting the questions with the content tool. Try to make content name to be the same as subject name except when the subject name is really long. For example, the subject name could be English Language while the content name could be English.

6. Add classrooms. To do that, click on Classrooms then the Add button. You will be asked to provide class name, class level, class teacher and class subjects. An example of class name could be SSS 1A while class level has to be SSS 1. Select all the subjects that is taken by at least a student in the class.

7. Add students. To add students, you will need to provide their information in excel. The student template is provided in Templates folder provided in what must have downloaded or given. The template allows you to add student photo. To do that, provide the photo name with the extension in the excel column titled Photo Path. All the photos should be in the same folder as the excel template. To upload the information, click on Students then the Add button. Browse to find the excel file and click Open.
Providing School And Server Settings

8. Go to school settings and add the following:

- **Academic session.** You will be required to provide the name, year and indicate if it is current session. An example is: name – 2017/2018, year – 2018, Is Current – Yes. You can add as many session as you wish. To set the current session, just click on the **Edit** button and change the **Is Current** to Yes or No.

- **Academic Term.** You will be required to provide the name and to indicate if it is current. For secondary schools, you can simple add First Term, Second Term and Third Term.

- **Assessments.** Assessments are the units that make up a student total score for each subject. For example, Continuous Assessment (40 marks), Objective Exam (40 marks) and Theory Exam (20 marks) constitute the assessments that sum up to 100 marks. You also need to decide the category of each assessment. If you select **MANUAL** category, it means the assessment will be done by paper and pen; and teachers will have to enter the score manually. If you select **CBT_OBJ** category, it means students will be assessed by objective questions on computer. If you select **CBT_Theory**, it means students will be assessed by theory on computer. Theory CBT are not automatically graded. The subject teacher for a given subject in a given class will grade theory questions assessed via CBT. The grading will be done on the Teachers Portal.

- **Report Card Template.** Send a sample of how you want your report card to appear and we will create a customized template for you to upload via the **Add** button.

- You can change the grading system as well as decide whether student should see their scores after taking an Objective CBT.
Licensing Students

Every student is required to have a license per term. To do that, take the following steps.

1. Buy license that corresponds to the number of student you want to license. SEMS license is in month. For instance, if you want to license 100 students for a term and let us say a term runs for 3 months. You will need 300 months worth of license. Throughout that 3 months a student can take as many tests as possible. Once the license expires no new scores will be saved against that student. A renewal will be required.

2. After paying for the license, your license will reflect on your account on testdriller.com.

3. To generate license for each student, log into your account on testdriller.com, go to Test Centre -> License menu (https://www.testdriller.com/users/test_centre_license). Under School Student License, select your server name, the duration of the license and the admission numbers of the students. You can copy the admission numbers from the excel file containing student details and paste it directly. Click on Generate button. You will see a pop-up showing you the license codes with other information. Download the table. It will be downloaded as an excel file.

4. On the Admin Portal, go to Students and then click the License button. Browse for the downloaded excel file and then open.

And that is it!
Creating And Uploading Questions

To create your questions, take the following steps:

1. Install **TestDriller Content Tool** on the computer you want to use. Note that the computer may not be on any network. Your computer must have DotNet Framework installed. If your computer does not have, install the DotNetFX40 in the downloaded package.

2. Run the content tool.

3. A page will show up telling you to Start or Open an existing project. Click on **Start A New Project**.


5. Once the questions are set and deployed, run the **Admin Portal**, click on **Content** followed by **Upload Questions**. A dialog box will show up asking you to browse for the deployed zip file. Once you have located it, open it.

6. Wait for the file to be uploaded.
Things To Note Before Taking CBT

- Each class teacher should log into the Teachers Portal to set the current paper or subject.
- To change the current paper on the teachers portal, select the classroom you want to set. Click on Classroom Settings. Set the Current Assessment, Current Test Subject, Shuffle Questions, Shuffle Options, Number of Questions and Total Time for the paper. You can also decide whether student should be allowed to retake same paper several times. Note that except you turn it on, a student cannot take same paper twice. It should be turned on when there is a need for a student to retake a paper.
- The server computer should not run out of power during test. Ideally it should be a laptop with good battery or a desktop computer connected to a reliable power supply. If the server computer goes off suddenly, the students might be forced to start afresh. However, the clients computers does not require steady power supply since the exam state is saved on the server.
- Students can log out from one computer to continue on another computer.
- The admin can monitor ongoing test via the Admin Portal.
To enter scores manually or grade theory CBT as a subject teacher, log into the teachers portal, click on your subject and then show the class. For theory CBT, you will see a pen button beside the theory score. Click on it to start grading a student. Do not forget to click on the **Save All Changes** button after editing scores.

As a subject teacher, you can print score sheet for all students in each class. The score sheet also contains the position of each student in your subject.

A teacher sees only the subjects they teach.

Class teachers are responsible for printing out report cards and result broad sheets.

Class teachers can send result via SMS or email address to students. To send SMS, the admin must have set the SMS template in the **Admin Portal**. It is required that you fund your SMS units on your account with testdriller.com.
An SMS template is required before result can be sent via sms to students. The SMS template is provided by the admin in the Admin Portal. Here are the things to note:

- Set the Sender ID of the SMS. This the name the receiver will see. Go to Settings -> SMS -> SMS Sender Id.

- You can set SMS template via the settings menu – Settings -> SMS -> Result SMS.

- A dialog box will show up. Type the message in the box provided. The message can include any of the placeholders. Placeholders temporarily stand for the actual value that will appear eventually. Below is a list of allowed placeholders.

<table>
<thead>
<tr>
<th>Placeholders</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>[NAME]</td>
<td>Student name</td>
</tr>
<tr>
<td>[TERM]</td>
<td>Current term</td>
</tr>
<tr>
<td>[TOTAL_SCORE]</td>
<td>Student total score</td>
</tr>
<tr>
<td>[TOTAL_SCORE_OBTAINABLE]</td>
<td>Total score that can be obtained</td>
</tr>
<tr>
<td>[AVERAGE_SCORE]</td>
<td>Student average score</td>
</tr>
<tr>
<td>[POSITION]</td>
<td>Student position in their class</td>
</tr>
<tr>
<td>[SCHOOL_NAME]</td>
<td>The school name</td>
</tr>
<tr>
<td>[SUBJECT: SCORE]</td>
<td>A list of subject against the score</td>
</tr>
<tr>
<td>[SUBJECT: GRADE]</td>
<td>A list of subject against the grade</td>
</tr>
<tr>
<td>[SUBJECTS]</td>
<td>A list of subjects separated by commas</td>
</tr>
<tr>
<td>[SCORES]</td>
<td>A list of scores separated by commas</td>
</tr>
<tr>
<td>[GRADES]</td>
<td>A list of grades separated by commas</td>
</tr>
<tr>
<td>SMS Template</td>
<td>Actual SMS</td>
</tr>
<tr>
<td>------------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------</td>
</tr>
</tbody>
</table>
| Hi [NAME],
Below is your [TERM] result.
[SUBJECT: SCORE]
Position – [POSITION]
Total Score – [TOTAL_SCORE]
Average Score – [AVERAGE_SCORE]
From [SCHOOL_NAME]                                                          | Hi Dave,
Below is your First Term result
English: 70
Mathematics: 64
Economics: 73
Biology: 80
Agric Science: 58
Position – 3
Total Score – 345
Average Score – 69
From IAF SAWII Academy                                                        |
| [NAME]
PERFORMANCE
[SUBJECT: GRADE]
POSITION: [POSITION]
AVERAGE SCORE: [AVERAGE_SCORE]                                               | Dave
PERFORMANCE
English: A
Mathematics: B
Economics: A
Biology: A
Agric Science: C
POSITION: 3
AVERAGE SCORE: 69
Checking And Updating Your Account

- To check your account details from the Admin Portal as recorded on our server (testdriller.com), go to Account -> View. You should see your school information as well the number of SMS units remaining. Note that access to the internet is required in this case.

- To change your account details including Access Code as recorded on testdriller.com from the Admin Portal, go to Account -> Edit.
It is important you backup your server data frequently.

You can do both offline and online backup. Offline backup means that you will be asked to choose a folder where the data will be saved on an external or internal disk. On the other hand, online backup will save the data securedly on testdriller.com. You will need access to the internet to backup online.

You can also decide whether you want to backup all the information on the server or just database.

To backup all data offline, go to **Backup -> All -> Offline**.

To restore backup, go to **Backup -> Restore -> Offline**. Note that you can download online backup from your account on [https://www.testdriller.com/users/test_centre_server](https://www.testdriller.com/users/test_centre_server).
Sometimes you may want to clear certain information from the server. Those information are **Exam Logs** and **Database**. An exam log is a piece of information about an ongoing exam. Exam log is what makes it possible to resume a test after logging out without submitting. Sometimes it might be necessary to clear all exam logs especially if they got corrupted. Database stores virtually every information you add including student details, teachers details and results and many more. Sometimes you may want to wipe all the information on the database so as to start afresh. Note that you can backup, clear database, run a demo account and then restore previous database.

- To clear all exam log on **Admin Portal**, go to **Clear -> All Exam Log**.
- To clear exam log of one student, go to **Clear -> One Exam Log**.
- To wipe database, go to **Clear -> Database**.
How To Contact Us

- Email Address: support@testdriller.com
- Phone Number: 09037778195
- Website: https://www.testdriller.com/sems or https://www.testdriller.com/contact