
SIRE 2.0 TRAINING APPLICATION

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1. INTRODUCTION

1.1 General Information

SIRE 2.0 is an enhanced version of the original SIRE programme (VIQ7) by OCIMF, aimed at improving vessel safety, environmental protection, and operational efficiency.

The SIRE 2.0 inspection has been digitalized to improve accuracy, transparency and fairness. The questions in SIRE 2.0 are more comprehensive and offer deeper insights into vessel operations with graded responses instead of binary

In preparation for SIRE 2.0, the **SIRE 2.0 TRAINING APPLICATION** serves as an assessment platform, which will help the crew prepare for the actual inspections.

1.2 Terminologies and Acronyms

- SIRE: Ship Inspection Report Programme
- OCIMF: Oil Companies International Marine Forum
- VIQ7: Vessel Inspection Questionnaires, seventh edition

1.3 Purpose and Intended Audience of this Document

The purpose of the document is to highlight the need for a tool which would help the crew under SMM Technical Management to prepare for the SIRE inspections.

1.4 Overview and Scope of the Project

The **SIRE 2.0 TRAINING APPLICATION** is an assessment platform which will select a set of questions from a database for the crew members based on their ranks.

This tool will help the crew members to assess themselves while preparing for SIRE inspections.

Application Name	SIRE 2.0 ASSESSMENT APPLICATION
Database	JSON (question bank), Excel database
Programmed in	Python
File format	Executable file (yet to be worked on and tested)

The scope of the SIRE 2.0 Quiz Application project includes:

- 1. Preparation for SIRE Inspections:**
 - The application is designed to help crew members prepare thoroughly for SIRE inspections by testing their knowledge on relevant standards and procedures.
 - It provides a simulated testing that mirrors the types of questions and scenarios they may encounter during actual inspections.
- 2. Familiarization with SIRE Requirements:**
 - The application serves as an educational tool to familiarize crew members with the contents and requirements of the SIRE Requirements.
 - By engaging with these questions, users will gain a deeper understanding of the SIRE guidelines and best practices.

2. BUSINESS REQUIREMENTS

A. To prepare the crew for the SIRE inspections:

- 1. Comprehensive Coverage:**
 - The program ensures that the assessment covers all relevant aspects of SIRE 2.0 standards and guidelines, helping crew members gain a thorough understanding of the inspection criteria.

B. This training tool serves as a self-assessment tool for the crew on board:

- 1. Personalized Learning:**
 - Provides tailored assessments based on the crew member's rank and role, ensuring the questions are relevant to their specific responsibilities.
- 2. Feedback Mechanism:**
 - Offers feedback on the answers, along with their score, the list of questions which they answered correctly and the list of questions which they answered incorrectly.

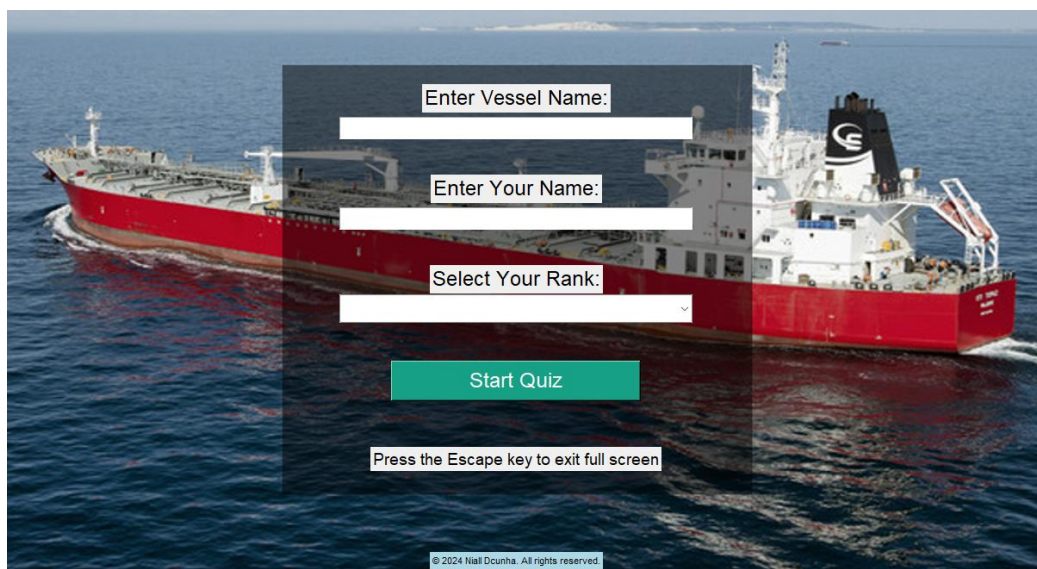
C. This training tool would reduce the manual intervention needed for training:

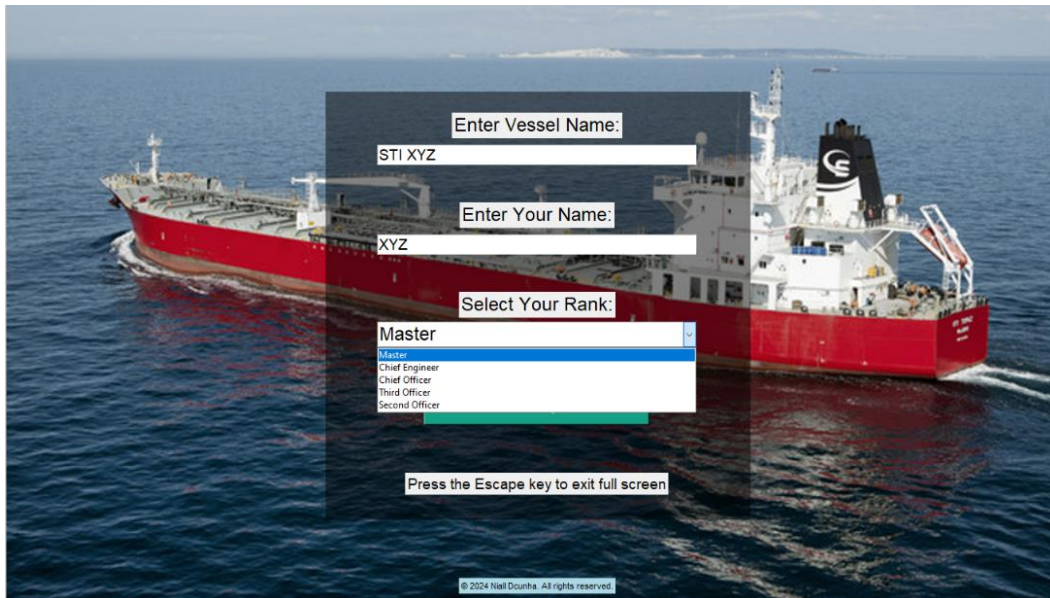
1. **Automated Assessment:**
 - Automate the assessment generation, administration, and grading processes to minimize the need for manual oversight and intervention.
2. **Efficient Training Delivery:**
 - Enables the crew members to complete training at their own pace and convenience, reducing the need for scheduled training sessions and associated administrative overhead.
3. **Resource Optimization:**
 - Frees up training personnel and resources, allowing them to focus on other critical tasks and responsibilities within the organization.

3. WORKING OF THE APPLICATION

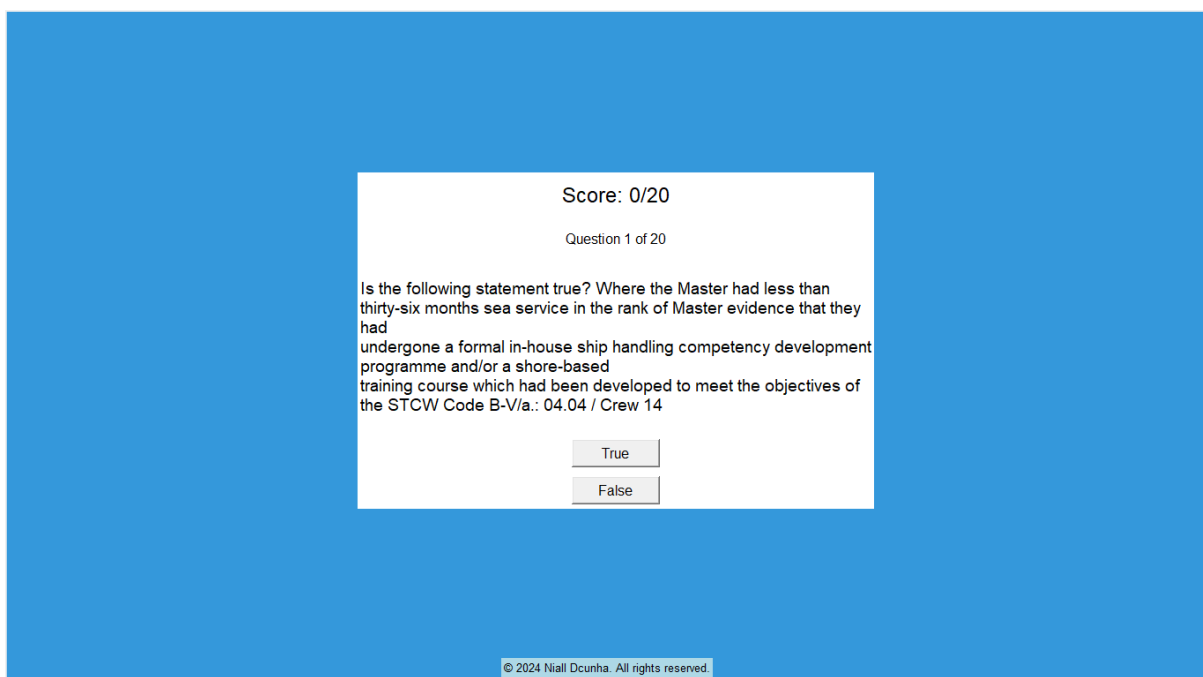
A. Once the user opens the executable file, the details page is loaded. Here, the user enters the required details.

B. Then the user will have to select his rank and click on the start quiz button.





- C. 1) Once the user starts the quiz, he is redirected to the quiz page, where 'x' number of True or False based questions (based on company requirements) are picked at random from the question bank and are displayed to the user.
- 2) The objective evidence is used as a question and the SMS reference serves as the answer, the user must select either True or False, if he thinks that the objective evidence (question) can be found in the provided SMS reference.
- 3) The program is designed to generate 40% wrong SMS references (against the objective evidence), and these are supposed to serve as trick questions.
- 4) A score count has been included, which gets incremented every time the user gives the right answer.



- D. 1) Once the user answers all the questions, the program generates a report and displays it to the user.
- 2) This report can also be sent to the office via email (this feature is yet to be worked on).
- 3) The report is in a PDF format. It contains the name of the person giving taking the assessment, the vessel name, the user's rank, his score, the list of questions which the user got right and the questions which he got wrong.

