

# The 46<sup>th</sup> Worldskills Competition

IT Software Solutions for Business

Test Project for the 1<sup>st</sup> Phase

## 第 46 届世界技能大赛

商务软件解决方案项目

首次阶段性考核试题

Overview

赛题概要

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## Introduction

### 介绍



**Skyward** coal energy development company is the largest coal energy development company in China, with six industrial sectors including coal, thermal power, new energy, hydropower, transportation and chemical industry. It is also the world's largest coal production company, thermal power company, wind power company and coal-to-oil coal chemical company.

**Skyward** 煤炭能源开发公司是我国规模最大的一家煤炭能源开发公司，拥有煤炭、火电、新能源、水电、运输、化工等 6 个产业板块，也是全球最大的煤炭生产公司、火力发电公司、风力发电公司和煤制油煤化工公司。

Along with the continuous expansion of the company, the existing asset management system, warehouse management system cannot meet the needs of the management, transportation management system, companies need a set of advanced and efficient software system, management, storage, coal transportation and other business assets, the system by desktop applications, mobile applications and Web applications, please design and develop the system according to the requirements of the company.

伴随公司规模的不不断扩大，现有的资产管理系统、仓储管理系统、运输管理系统已不能满足管理需要，公司需要一套先进高效的软件系统，管理资产、仓储、煤炭运输等业务，这套系统由桌面应用程序，移动应用程序和 Web 应用程序组成，请你根据公司要求设计开发该系统。

## Task at hand

### 目前任务

Because of the rapid expansion into other territories and with new offices opening all over the country, the management at **Skyward** has decided to implement a new software automation system. The main focus of the new system is to manage the company's assets warehouse and transportation.

由于公司迅速扩展到其他地区，并且在全国各地开设了新的办事处，**Skyward** 公司的管理层决定引进一套新的软件自动化系统。新系统的重点是管理公司资产、仓储和煤炭运输。

Six subprojects will be defined according to the needs of the company and will need to be done in less than 17 hours over 3 days.

根据公司的需求确定 6 个子项目，并且需要在 3 天中，不多于 17 小时内完成。

The main tasks for each session are described below.

各阶段主要任务如表 1 所示。

Tab.1 Main Tasks of Each Session

表 1 各阶段任务

Session 阶段	Task 任务	Remark 备注
1 (2.5 hours)	<b>Windows Application (桌面应用程序)</b> Login (登录) Warehouse Detail (仓库详情) Create Inventory Checking Task (创建盘点任务) View Inventory Checking Task (查看盘点任务) Input Inventory Checking Result (输入盘点结果) Inventory Checking Report (盘点报告)	
2 (3.5 hours)	<b>Mobile Application (移动应用程序)</b> Index Page (首页) Login (登录) Asset Management (资产管理) Register / Edit Asset (注册/编辑资产) Search Asset (查询资产) View Asset (查看资产) My Center (个人中心) Figure Login Setting (手势密码登录设置)	
3 (2.5 hours)	<b>Windows Application (桌面应用程序)</b> Asset Statistics (资产统计) Asset Profile (资产档案) Transportation Statistics (运输统计) Part Statistics (零部件统计) Lock Screen (锁屏)	
4 (3.5 hours)	<b>Mobile Application (移动应用程序)</b> Transportation Task Management (运输任务管理) Create Transportation Task (创建运输任务)	

Session 阶段	Task 任务	Remark 备注
	My Transportation Task (我的运输任务) Travelling Record (行程记录) Transportation Statistics (运输统计)	
5 (2.5 hours)	<b>Web Application (Web 应用程序)</b> Login (登录) Navigation Page (导航页) Inbound Part (入库零部件) Outbound Part (出库零部件) Search Part (查询零部件)	
6 (2.5 hours)	<b>Analyze and Design the Software Solution and PPT</b> (分析和设计软件解决方案和 PPT) Use-Case Diagram (用例图) Entity-Relationship Diagram (实体关系图) Wireframe Diagram (线框图) PowerPoint Presentation Document (幻灯片演示文档) 5 minutes PPT presentation for each competitor (每名选手 5 分钟的 PPT 汇报)	

## Requirements

### 需求

There are tasks that need to be delivered on windows, mobile and web-based platforms based on their application in the company. At the start of each session, which represents a section of work, thorough instructions are provided along with the required data, material and the deliverables expected.

根据公司使用的应用程序，有基于桌面，移动和网络平台的任务需要交付。每一个阶段的开始，都代表了一段工作，会提供详细的说明，以及所需的数据、材料和预期可交付成果。

There is an infrastructure list already available to all participants. It details the software/hardware specifications that the system needs to be developed and deployed on. All our clients will be using systems (desktop, mobile or web-based) of the same specifications to run and deploy the deliverables.

基础设施列表已提供给所有的参赛者。它详细介绍了开发和部署系统所需要的软件/硬件规格。我们所有的客户都将使用相同规格的系统（桌面，移动或网络）来运行和部署可交付成果。

As part of the documentation for the test project, you have also been given access to the "Style Guide" which details a set of standards for the company. Any material delivered, should abide by the guidelines proposed.

作为测试项目中文档的一部分，你还需要查看“Style Guide”，里面详细描述了该公司的一系列标准。任何交付的材料都应遵循所提出的风格指南。

## Evaluation Criteria

### 评判标准

The final submitted solutions within allocated time will be assessed by judges. The most prominent competitor (who gets the most marks) will be announced as the winner.

在分配的时间内提交的最终解决方案将由裁判进行评判，最优秀的人员（获得最多分值的人员）将被宣布为获胜者。

## Communication and Coordination

### 交流和合作

The purpose of this document is to give the people that are involved an overall idea of what the test project will consist of.

本文档的目的是让参赛者全面了解测试项目将包含哪些内容。

The information provided by this document is based on test project text and files that are currently being refined. They may change before the test project are presented to the participants.

由本文档提供的信息是基于目前正在完善的测试项目文本和文件。在测试项目呈现给参赛者之前，它们可能会发生变化。

## Other

### 其他

Information like names or pictures provided in the materials is all artificial, which has nothing to do with people, groups, events and situations in reality. Please ignore it if any coincidence occurs.

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