SOFTWARE TESTING

ISYS1087 Assignment 4 and ISYS1085 Assignment 4a

1. Background and Problem Setting

We are indebted to Planit Testing[1] who kindly provided this scenario as an example of authentic assessment.

Nightingale Services is a company that provides healthcare services such as nursing, psychology and physiotherapy to people in rural and regional areas across Australia. *Nightingale* currently has approximately 5000 employees and contractors; approximately 25% of these staff are office-based, with the remaining 75% working in a range of settings including: medical centres, in-patient homes, community centres, and the offices and worksites of companies.

The current HRIS application was implemented in 2010 and is no longer supported by the vendor. As such, *Nightingale* is currently planning for *Project Cassandra*, the implementation of a new, cloud-based human resources application that will meet the needs of the company, both now and into the future.

The implementation of the previous HR system did not go particularly well. It was implemented by the vendor with very little input from business stakeholders, and led to low levels of confidence in the system from both HR and Payroll teams. Employees also do not like using the current system as it is hard to complete simple tasks such as applying for leave—-especially for those employees who are not office-based.

During initial project scoping, a high-level list of requirements has been drawn up by the project team. The Project Manager, along with business stakeholders, are currently in the process of selecting a software application and implementation partners, so the precise application that will be used is unknown at this point. Whilst an implementation partner will be used to implement and configure the application, *Nightingale Services* wishes to perform all testing for *Project Cassandra* independently of the chosen vendor.

In respect of the project timeline, *Cassandra* is in the early planning stages so timelines have not been fully defined. The project manager is looking for information about how long testing might take, so it can be built into the schedule, but expects that it might be somewhere around 4-6 weeks for planning and somewhere between 4-16 weeks for testing. The test team will be working in the context of the broader project team, which includes project manager, business analysts, business stakeholders, change management, IT operations, as well as the yet to be selected vendor staff. There are no specific support arrangements post roll out, at this stage.

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[1] www.planit.com

2. Marks

For ISYS1087 (undergraduate) students a total of 24 marks will be available.

For ISYS1085 (postgraduate) students a total of 19 marks will be available. A further 5 marks will be available through Part B.

The marking metric is available on Canvas.

3. Task

As this application is considered critical to the day-to-day running of the organisation, including being able to pay employees on time, there is significant interest in the *approach* that is taken to testing this application, including interest from the heads of both IT and HR. Accordingly, they have requested a formal presentation, maximum 20 minutes, describing the approach **your test consultancy team** (maximum 6) plan to take for testing *Project Cassandra.* In particular, your team should cover the following:

- Test approach including levels/phases and types planned for the test campaign
- Test requirements, whether that be for testers, environments, equipment, and training
- Scope
- High level test schedule
- Risks identified and planned mitigation
- Any assumptions or dependencies

4. Requirements

ID	Description	Priority
1	The application needs to include functionality relating to: • Employee and contractor details and contact information • Organisation chart • Employee compensation • Leave • Performance management • Career development and planning • Employee self-service • Time and attendance	High
2	Application needs to integrate with existing systems, including: • Email system • SMS gateway • Cloud based ERP • Payroll • Learning management system	Critical
3	All employee and contractor data from past 10 years must be migrated to the new system	High
4	Application must have role-based security, allowing users to only access information relevant to their job role	Critical
5	During Phase 1 of the project, a swivel chair interface will be maintained with the existing recruitment system	Low
6	Application needs to differentiate between employees, EBA employees, and contractors, including consideration of working hours and leave allowances	High
7	Application needs to be available between 7 am and 12 am every day of the year	High
8	Employees must be able to apply for leave using their iOS devices	High
9	Application needs to be compliant with Australian Legislation	Critical