Functional requirements

1.1. Login

1.1.1. Each login to the system will require identification by the community user name and password.

1.1.2. The username will be unique to each user.

1.1.3. The password will be encrypted with '\*' when you tap.

1.1.4. Once identified, the system will route the game to a window where it knows how to handle its authorized Western functions.

1.1.5. You will not be required to read identification until you exit the application (closing the browser window, executing the logout).

1.2. System navigation

1.2.1. A user who has not undergone the identification procedure in section 2.1 - will not be allowed on any system screen except the login window - the Login

1.2.2. A user who has undergone the authorization procedure and allowed to log on to the system will not be allowed on any system screen that he is not authorized to.

1.3. system administrator

2.3.1 A shift shall include the fields: shift number, start date and time, date and end time, personnel required.

2.3.2 The system shall ensure that the date and time of the shift is later than the date and time of the shift started.

2.3.3 The required manpower will be defined as a range, ranging from minimum to maximum number of employees embedded for shift.

2.3.4 The system shall ensure that the maximum number of employees per shift is higher than the minimum number.

2.3.5 The system will ensure that all data is entered before the operation is approved.

2.3.6 The administrator will be able to update shift data (see section 1.3.1.1).

2.3.7 The administrator can delete a shift from the site's database.

2.3.8 The administrator can add a new alert.

2.3.9 The administrator can delete an existing alert.

2.3.10 The administrator will be able to set the alarm time in advance for each alert that the system provides.

2.3.11 The administrator can add a working role to the database of the site.

An employee role will include the fields: role number, role name.

2.3.12 The system will ensure that all data is entered before the operation is approved.

2.3.13 The administrator can update role settings.

2.3.14 The administrator can define a role inclusion (in the case of a high level of unemployment, it can be embedded into a low level position).

2.3.15 The administrator can delete a role from the site.

2.3.16 The Administrator will be able to set the inlay constraints within the shifts required for the site he is responsible for.

2.4 Employee Manager

2.4.1 The Employee Manager can add a new employee to the site's database.

2.4.2 The Employee Manager will be able to view employee information on the screen.

2.4.3 The Employee Manager will be able to update the employee details.

2.4.4 The Employee Manager will be able to delete employee information from the site's database.

2.4.5 The Employee Manager will be able to issue a report containing employee inlays.

2.4.6 The Employee Manager will be able to issue a report containing employee inlays.

2.5 Responsible for inlays

2.5.1 The inlay manager is responsible for running the inlay algorithm for shifts.

2.5.2 The inlay manager will be able to manually change the inlay created by the system at will.

2.5.3 Responsible for the inlays can manually change the inlays created by the system at will.

2.5.4 Responsible for inlays will be able to see the history of each employee's inlays.

2.5.5 Responsible for inlays will be able to see what employee training he has undergone.

2.6 works

2.6.1 For an employee, the following information will be retained:

2.6.2 Required fields:

• First name, last name, role (fields containing letters only).

• Employee number, ID (numeric fields).

• Contract start date, contract end date (date fields).

2.6.3 Authority fields:

• Username (letters only).

• Password (can contain letters and numbers).

2.6.4 The system will keep additional information for each employee in accordance with the requirements of the site of action at which he / she works (for example, the date the employee performed various courses / training).

2.6.5 The system will ensure that each field contains only valid values.

2.6.6 The system will not display the employee password on the screen. Instead, asterisks will be displayed as the number of characters in the password.

2.6.7 The system shall ensure that all required fields are entered before the operation is approved.

2.6.8 The system will allow the employee to determine his or her inlay preferences for the coming week.

2.6.9 The system will allow the employee to change his or her preferences for the coming week.

2.6.10 The system will allow each employee to enter their inlay preferences for each shift (can, cannot, not interested).

2.6.11 The system will allow each employee to enter the reason for not being able to work on a particular shift (illness, study, reserve or reinforce to another terminal) in the comments field.

2.6.12 The system will keep the logging history for each employee (for a period to be set by the administrator).

2.7 Alerts

2.7.1 The system will alert the employee inlays that do not comply with the site constraint as a result of the constraint.

2.8 Inlay for Shifts

2.8.1 The system will allow the creation of a solution to the shifting problem.

2.8.2 The inlay algorithm will take into account the constraints of the employees:

2.8.3 Personal constraints (sickness / reserve / studies / reinforcement from another terminal).

2.8.4 Professional constraints (employee who has not undergone training / course / still overlapping, etc.)

2.9 Inlay in-shift

2.9.1 The system will enable the solution of the embedded problem within shifts.

2.9.2 The inlay algorithm will take into account employee training constraints.

2.9.3 The algorithm will consider every other need according to the security requirements of the site.

2.10 Inlay rules

2.10.1 Each site manages its own embedding rules according to its needs (see Appendix 7.2).

2.10.2 Inlay rules are inherently dynamic. The system must support changes to the inlay rules.

3 non-functional requirements

3.3 Performance Speed

3.3.1 The inlay algorithms will complete their run in no more than 5 minutes.

3.3.2 90% of the rest of the system will be done in less than one second.

3.4 Reliability

3.4.1 Access to DB will be enabled only for authorized users of the Company.

3.4.2 Only authorized users will be allowed to log in to the system.

3.4.3 A user will not access any screen that is not authorized to view it.