**SOFTWARE FUNCTION SPECIFICATION (SFS)**

**Doc: SRS.v1**

INFO STAFF (HR) PROJECT

**NOTICE OF CHANGES TABLE**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Date** | **Version** | **\* A, M, D** | **Description** | **Author** |
| 07/09/2020 | Ver 1.001 | A, M | 1. Define ERRP functions in project. | Anhtn |
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\*A - Added M - Modified D – Deleted

Version: x.y:

* The first version start 1.0
* After reviewing and updating, version increase to 1
* After golive, if document have any changes, version increase to

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| **Maker** | *Name: Date: <dd/MM/yyyy>*  *Role:* |
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# Introduction

## Purpose of document

## Scope

## Term and acronyms

|  |  |  |
| --- | --- | --- |
| **Term/Acronyms** | **Full name** | **Meaning** |
| HR | Human resource | Infoplus staff management |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

## References

|  |  |  |
| --- | --- | --- |
| **No.** | **Name** | **Note** |
| 1 |  |  |
| 2 |  |  |
| 3 |  |  |

# Overview

## General description

## Flow

N/A

## Models of overall use cases

### Use-case diagram



### Actors

|  |  |  |
| --- | --- | --- |
| **Idx** | **Actor** | **Definition** |
|  | Admin | Administrator |
|  | Manager | Manager group. |
|  | Staff | Staff group |
|  |  |  |
|  |  |  |

### Usecase

|  |  |  |
| --- | --- | --- |
| **Idx** | **Usecase** | **Note** |
|  | Login | Apply for all user |
|  | Configuration |  |
|  | Check-in/check-out |  |
|  | Request holiday |  |
|  | Request overtime |  |
|  | Approve holiday |  |
|  | Approve overtime |  |
|  | History | Inclulde holiday history and timecard history |
|  | Report |  |

## Integrations

N/A

## Switching

N/A

# Function requirements

## Check-in function

### Flow



|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Index** | **Name** | **Type** | **Input** | **Output** | **Action** | **Note** |
| 1 | api/v1.0/infostaff/check-in | url | {  staffCode: <value>(\*),  checkIn: <value>(\*),  checkOut: <value>,  workingDate: <value>(\*)  } | {  code: <value>  Reason: <value>  } | Call Check-in controller |  |
| 2 | checkIn | Func | User loginUser,  TimeCardModel model | ResponseModel | Call check-in service.  If validation error, return RepsoneModel{ code = 14, content = “Validation error”}.  If mapping error, return ResponseModel{code = 15, content = “Mapping error”}.  If execute error, reuturn ResponseModel{code = 10,  Content= “Execution error”}  If success, return ResponseModel{code = 00,  Content = “Success”} | User is springsecurity model |
| 3 | Validation | Func | TimeCardModel model | Boolean | Validation key and not null data |  |
| 4 | modelToEntity | Func | TimeCardModel model | TblTimeCardEntity |  |  |
| 5 | insertTimeCard | Func | TblTimeCardEntity entity | Long | Insert into db |  |

## Check-out function

### Flow



|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Index** | **Name** | **Type** | **Input** | **Output** | **Action** | **Note** |
| 1 | api/v1.0/infostaff/check-out | url | {  staffCode: <value>(\*),  checkIn: <value>,  checkOut: <value>(\*),  workingDate: <value>(\*)  } | {  code: <value>  Reason: <value>  } | Call Check-out controller |  |
| 2 | checkOut | Func | User loginUser,  TimeCardModel model | ResponseModel | Call check-out service.  If validation error, return RepsoneModel{ code = 14, content = “Validation error”}.  If mapping error, return ResponseModel{code = 15, content = “Mapping error”}.  If execute error, reuturn ResponseModel{code = 10,  Content= “Execution error”}.  If no data found, reuturn ResponseModel{code = 11,  Content= “No data found”}.  If success, return ResponseModel{code = 00,  Content = “Success”} | User is springsecurity model |
| 3 | validation | Func | TimeCardModel model | Boolean | Validation key and not null data |  |
| 4 | modelToEntity | Func | TimeCardModel model | TblTimeCardEntity |  |  |
| 5 | findById | Func | Long id | TblTimeCardEntity | Get timecard record by ID |  |
| 6 | updateTimeCard | Func | TlimeCardEntity entity | Void | Update fileds:  Checkout  In database |  |

## Change timecard information function

### Flow



|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Index** | **Name** | **Type** | **Input** | **Output** | **Action** | **Note** |
| 1 | api/v1.0/infostaff/change-timecard | url | {  staffCode: <value>(\*),  checkIn: <value>,  checkOut: <value>(\*),  note: <value>(\*)  workingDate: <value>(\*)  } | {  code: <value>  Reason: <value>  } | Call change timecard controller |  |
| 2 | changeTimeCard | Func | User loginUser,  TimeCardModel model | ResponseModel | Call changTimeCard service.  If validation error, return RepsoneModel{ code = 14, content = “Validation error”}.  If mapping error, return ResponseModel{code = 15, content = “Mapping error”}.  If execute error, reuturn ResponseModel{code = 10,  Content= “Execution error”}.  If no data found, reuturn ResponseModel{code = 11,  Content= “No data found”}.  If success, return ResponseModel{code = 00,  Content = “Success”} | User is springsecurity model |
| 3 | validation | Func | TimeCardModel model | Boolean | Validation key and not null data |  |
| 4 | modelToEntity | Func | TimeCardModel model | TblTimeCardEntity |  |  |
| 5 | findById | Func | Long id | TblTimeCardEntity | Get timecard record by ID |  |
| 6 | updateTimeCard | Func | TlimeCardEntity entity | Void | Update fileds:  Check-in,  Check-out,  Note,  Changed-user,  Changed-date  In database |  |

## Get Time Card Information

### Flow



|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Index** | **Name** | **Type** | **Input** | **Output** | **Action** | **Note** |
| 1 | api/v1.0/infostaff/get-timecard | url | {  staffCode: <value>,  groupCode: <value>,  workingDate: <value>  previousMonth: <value>,  previousQuarter: <value>,  fromDate: <value>,  toDate: <toDate>  } | {  {TimeCardModel model 01},  { TimeCardModel model 02},  { TimeCardModel model 03},  ….  { TimeCardModel model n}  } | Call get timeCard controller |  |
| 2 | getTimeCard | Func | SearchTimeCardModel model | List<TimeCardModel> |  |  |
| 3 | entityToModel | Func | List<TblTimeCardEntity> entities | List<TimeCardModel> |  |  |

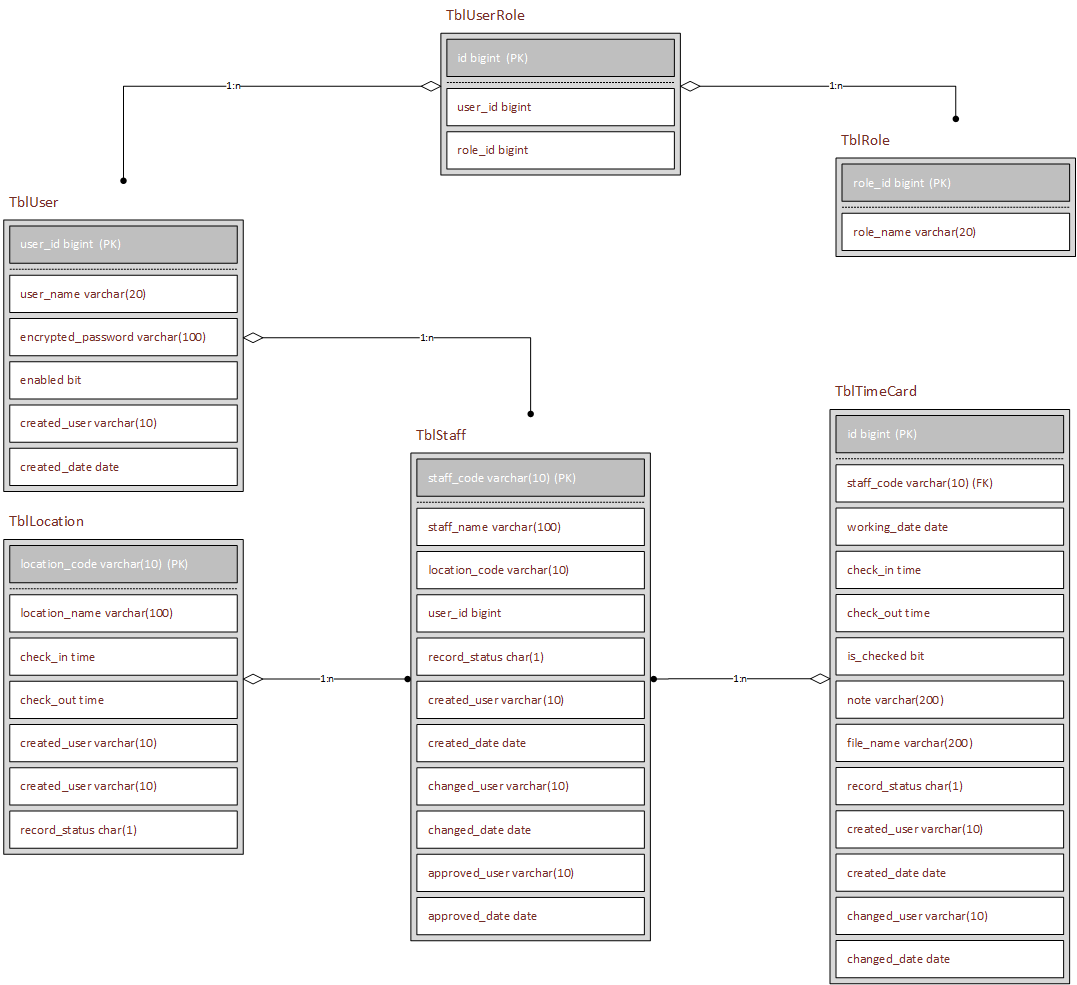
## Import TimeCard information

### Flow



|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Index** | **Name** | **Type** | **Input** | **Output** | **Action** | **Note** |
| 1 | api/v1.0/infostaff/import-timecard | url | ExcelFile dataFile | {  Code: <value>,  Reason: <value>,  total: <value>,  success: <value>  fail: <value>  } | Call import timeCard controller |  |
| 2 | importTimeCard | Func | User user, File dataFile | ResponseModel |  |  |
| 3 | ValidationFile | Func | File dataFile | Boolean |  |  |
| 4 | readData | Func | File dataFile | List<TimeCardModel> models | Convert data from file to model |  |
| 5 | fileToEntity | Func | File dataFile | TblFile |  |  |
| 6 | modelToEntity | Func | TimecardModel model | TblTimeCardEntity |  |  |
| 7 | insertTimeCard | Func | TblTimeCardEntity entity | Long |  |  |
| 8 | countExecuteData | Func | Long timeCardId | List<int> | If row execute, total += 1.  If execute success, success +=1.  If execute failed, fail +=1. |  |
| 9 | insertFile | Func | TblFile entity | Long |  |  |
| 10 | createResponseModel | Func | List<int> countExecuteDt | ResponseModel |  |  |

# Database



|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Name | **tblLocation** | | | | |
| **Name** | **Type** | **Is KEY** | **Is NULL** | **Is AU** | **Default value** |
| Location\_code | Varchar(10) | Y | N | N |  |
| Location\_name | Varchar(100) | N | N | N |  |
| Check\_in | Time | N | N | N |  |
| Check\_out | Time | N | N | N |  |
| Created\_user | Varchar(10) | N | Y | N |  |
| Created\_date | Date | N | Y | N |  |
| Record\_status | Char(1) | N | N | N | O: open |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Name | **tblUser** | | | | |
| **Name** | **Type** | **Is KEY** | **Is NULL** | **Is AU** | **Default value** |
| User\_id | Bigint | Y | N | Y |  |
| User\_name | Varchar(20) | N | N | N |  |
| Enabled | Bit | N | N | N |  |
| Created\_user | Varchar(10) | N | Y | N |  |
| Created\_date | Date | N | Y | N |  |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Name | **tblRole** | | | | |
| **Name** | **Type** | **Is KEY** | **Is NULL** | **Is AU** | **Default value** |
| Role\_id | Bigint | Y | N | Y |  |
| Role\_name | Varchar(20) | N | N | N |  |
| Created\_user | Varchar(10) | N | Y | N |  |
| Created\_date | Date | N | Y | N |  |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Name | **tblUserRole** | | | | |
| **Name** | **Type** | **Is KEY** | **Is NULL** | **Is AU** | **Default value** |
| id | Bigint | Y | N | Y |  |
| User\_id | Bigint | N | N | N |  |
| Role\_id | Bigint | N | N | N |  |
| Created\_user | Varchar(10) | N | Y | N |  |
| Created\_date | Date | N | Y | N |  |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Name | **tblStaff** | | | | |
| **Name** | **Type** | **Is KEY** | **Is NULL** | **Is AU** | **Default value** |
| Staff\_code | Varchar(10) | Y | N | N |  |
| Staff\_name | Varchar(100) | N | N | N |  |
| Join\_date | Date | N | N | N |  |
| Dob | Date | N | N | N |  |
| Gender | Char(1) | N | N | N | 1: male, 0: woman |
| Location\_code | Varchar(10) | N | N | N |  |
| File\_name | varchar(100) | N | Y | N |  |
| Created\_user | Varchar(10) | N | Y | N |  |
| Created\_date | Date | N | Y | N |  |
| Changed\_user | Varchar(10) | N | Y | N |  |
| Changed\_date | Date | N | Y | N |  |
| Record\_status | Char(1) | N | N | N | O: open, C: close |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Name | **tblTimeCard** | | | | |
| **Name** | **Type** | **Is KEY** | **Is NULL** | **Is AU** | **Default value** |
| Id | Bigint | Y | N | Y |  |
| Staff\_code | Varchar(10) | N | N | N |  |
| Working\_date | Date | N | N | N |  |
| Check\_in | Time | N | Y | N |  |
| Check\_out | Time | N | Y | N |  |
| Is\_checked | Bit | N | N | N |  |
| Note | Varchar(200) | N | Y | N |  |
| File\_name | Varchar(200) | N | Y | N |  |
| Created\_user | Varchar(10) | N | N | N |  |
| Created\_date | Date | N | N | N |  |
| Changed\_user | Varchar(10) | N | N | N |  |
| Changed\_date | Date | N | N | N |  |
| Record\_status | Char(1) | N | N | N | O: open, C: close |

# Appendix