SDT-Get Priority()Method optimization – Detailed Analysis Document

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|  | |  | |  | |
| Circulation List |  | | **Version number of the template** | | **1.0** | |
| Version number of the work product | 1.0 | | | | | |

# Description:

According to this user story (US134), to optimize the SDT application GetPriority() method should be optimized by removing the hard coded values and implementing it by using ENUM and If there is any click calls are made it can be removed to increase the performance.

**2. Brief Summary:**

The priority values, Safety Concern Status, System status values are hardcoded in GetPriority() method. To optimize the code hardcoded these values can be removed from the method and it can be implemented using ENUM.

## Objects Being Modified

There are two objects to be modified to accommodate US134

* 1. Release\_1.4\NewSDTApplication\Utilities\SDTEnum.
  2. Release\_1.4\NewSDTApplication\Utilities\CallClickService.

SDTEnum.cs

public enum GEHCSafetyConcernStatus

{

[Description("Yes")]

yes,

[Description("Actual")]

actual,

[Description("Potential")]

potential,

[Description("No")]////Added by Prajna on March7th for US134

no

}

public enum Priority//Added by Prajna on March7th for US134

{

PriorityTwoHundred = 200,

PrioritySixHundredFifty = 650,

PrioritySixhundred = 600,

PriorityEightHundred = 800,

PrioritySevenHundred = 700,

PrioritySevenHundredFifty = 750,

PriorityThreeHundred = 300,

PriorityFourHundred = 200,

PriorityFiveHundredEighty = 580,

PriorityFiveHundredNinety = 590,

PriorityFiveHundredSeventy = 570,

}

public enum SystemStatusValue//Added by Prajna on March7th for US134

{

[Description("up")]

up,

[Description("partial")]

partial,

[Description("down")]

down

}

public enum SystemStatusNumber//Added by Prajna on March7th for US134

{

[Description("3")]

three,

[Description("2")]

two,

[Description("1")]

one

}

CallClickService.cs\Getpriority()

public int GetPriority() //Enum is implemented by Prajna on March 7 for US134

{

TrasformSiebelToClick objSiebelToClick = new TrasformSiebelToClick();

var res = (SiebelJsonToEntity)HttpContext.Current.Session["SiebelData"];

NewSDTApplication.ServiceOptimizationService.TaskobjSiebelTask=new NewSDTApplication.ServiceOptimizationService.Task();

if (string.IsNullOrEmpty(HttpContext.Current.Session["systemstatus"] as string))

{

//EquipmentStatus changed to currentEquiptmentStatus.Done by Phani Kanth P [10/18/2016]

stringsystemstatus= objSiebelToClick.GetSystemStatus(res.serviceRequest.currentEquiptmentStatus);

if (!string.IsNullOrEmpty(systemstatus))

{

var arr = systemstatus.Split('(');

if(arr[0].Trim()== Convert.ToString(SDTEnum.GetEnumDescription(SDTEnum.SystemStatusNumber.three)))

HttpContext.Current.Session["systemstatus"]= Convert.ToString(SDTEnum.GetEnumDescription(SDTEnum.SystemStatusValue.up));

elseif(arr[0].Trim()== Convert.ToString(SDTEnum.GetEnumDescription(SDTEnum.SystemStatusNumber.two)))

HttpContext.Current.Session["systemstatus"]= Convert.ToString(SDTEnum.GetEnumDescription(SDTEnum.SystemStatusValue.partial));

elseif(arr[0].Trim()== Convert.ToString(SDTEnum.GetEnumDescription(SDTEnum.SystemStatusNumber.one)))

HttpContext.Current.Session["systemstatus"]= Convert.ToString(SDTEnum.GetEnumDescription(SDTEnum.SystemStatusValue.down));

}

else

HttpContext.Current.Session["systemstatus"] = "";

}

switch (res.serviceRequest.srType)

{

default:

objSiebelTask.Priority = Convert.ToInt32(SDTEnum.Priority.PriorityTwoHundred);

break;

case "PM":

if(res.serviceRequest.gEMSEntitlementFlag== Convert.ToString(SDTEnum.GetEnumDescription(SDTEnum.GEMSEntitlementFlag.y)))

objSiebelTask.Priority = Convert.ToInt32(SDTEnum.Priority.PrioritySixHundredFifty);

else

objSiebelTask.Priority = Convert.ToInt32(SDTEnum.Priority.PrioritySixhundred);

break;

case "Corrective Repair":

if(res.serviceRequest.gEMSEntitlementFlag== Convert.ToString(SDTEnum.GetEnumDescription(SDTEnum.GEMSEntitlementFlag.y)))

{

if (!string.IsNullOrEmpty(HttpContext.Current.Session["systemstatus"] as string))

{

if((res.serviceRequest.gEHCSafetyConcern== Convert.ToString(SDTEnum.GetEnumDescription(SDTEnum.GEHCSafetyConcernStatus.actual)) ||

res.serviceRequest.gEHCSafetyConcern== Convert.ToString(SDTEnum.GetEnumDescription(SDTEnum.GEHCSafetyConcernStatus.potential))) &&

(HttpContext.Current.Session["systemstatus"].ToString()== Convert.ToString(SDTEnum.GetEnumDescription(SDTEnum.SystemStatusValue.down))))//3(System up and running)

objSiebelTask.Priority = Convert.ToInt32(SDTEnum.Priority.PriorityEightHundred);

elseif((res.serviceRequest.gEHCSafetyConcern== Convert.ToString(SDTEnum.GetEnumDescription(SDTEnum.GEHCSafetyConcernStatus.no))

&&(HttpContext.Current.Session["systemstatus"].ToString()== Convert.ToString(SDTEnum.GetEnumDescription(SDTEnum.SystemStatusValue.partial))))

||HttpContext.Current.Session["systemstatus"].ToString()== Convert.ToString(SDTEnum.GetEnumDescription(SDTEnum.SystemStatusValue.up)))

objSiebelTask.Priority= Convert.ToInt32(SDTEnum.Priority.PrioritySevenHundredFifty);

else

objSiebelTask.Priority = Convert.ToInt32(SDTEnum.Priority.PriorityTwoHundred);

}

else

objSiebelTask.Priority = Convert.ToInt32(SDTEnum.Priority.PriorityTwoHundred);

}

else

{

if (!string.IsNullOrEmpty(HttpContext.Current.Session["systemstatus"] as string))

{

if((res.serviceRequest.gEHCSafetyConcern== Convert.ToString(SDTEnum.GetEnumDescription(SDTEnum.GEHCSafetyConcernStatus.actual))

||res.serviceRequest.gEHCSafetyConcern== Convert.ToString(SDTEnum.GetEnumDescription(SDTEnum.GEHCSafetyConcernStatus.potential)))

&&(HttpContext.Current.Session["systemstatus"].ToString()== Convert.ToString(SDTEnum.GetEnumDescription(SDTEnum.SystemStatusValue.down))))// Here in the system statum we are getting numbering(3(System up and running))

objSiebelTask.Priority = Convert.ToInt32(SDTEnum.Priority.PrioritySevenHundred);

&&(HttpContext.Current.Session["systemstatus"].ToString()== Convert.ToString(SDTEnum.GetEnumDescription(SDTEnum.SystemStatusValue.partial))

||HttpContext.Current.Session["systemstatus"].ToString()== Convert.ToString(SDTEnum.GetEnumDescription(SDTEnum.SystemStatusValue.up))))

objSiebelTask.Priority = Convert.ToInt32(SDTEnum.Priority.PriorityFourHundred);

else

objSiebelTask.Priority = Convert.ToInt32(SDTEnum.Priority.PriorityTwoHundred);

}

else

objSiebelTask.Priority = Convert.ToInt32(SDTEnum.Priority.PriorityTwoHundred);

}

break;

case "Installation":

objSiebelTask.Priority = Convert.ToInt32(SDTEnum.Priority.PriorityThreeHundred);

break;

case "FMI":

switch (res.serviceRequest.srSubType)

{

case "Safety":

objSiebelTask.Priority = Convert.ToInt32(SDTEnum.Priority.PriorityFiveHundredEighty);

break;

case "Mandatory":

objSiebelTask.Priority = Convert.ToInt32(SDTEnum.Priority.PriorityFiveHundredNinety);

break;

case "On Request":

objSiebelTask.Priority = Convert.ToInt32(SDTEnum.Priority.PriorityFiveHundredSeventy);

break;

}

break;

}

return objSiebelTask.Priority;

}

1. **Estimates (In Story Points)**

5 story points

# Revision History

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **#** | Date | Version # | Section / Page # changed | Details of changes made |
| 1. | 03/7/2017 | 1.0 | All | All |
| 2. |  |  |  |  |