

Case Study

The main list view is this:

Equipment

Filters

Equipment number Status Last location Detention

1 selected

Equipment number	DG	GOH	Hotbox	Demurrage	Detention	Gate out	Planned delivery	Actual Delivery	Last location	Status
<input checked="" type="radio"/> TGBU5538709	N	N	N	-	-	-	07-10-2019	-	-	Planning completed
<input type="radio"/> BMOU6553638	N	N	N	-	-	-	07-10-2019	-	-	Planning completed
<input type="radio"/> EMCUS901760	N	N	N	-	-	-	07-10-2019	-	-	Planning completed
<input type="radio"/> DRYU947900	N	N	N	-	-	-	07-10-2019	-	-	Planning completed
<input type="radio"/> EGSU9092351	N	N	N	-	-	-	07-10-2019	-	-	Planning completed
<input type="radio"/> FCUI7310707	N	N	N	-	-	-	07-10-2019	-	-	Planning completed
<input type="radio"/> EITU1339013	N	N	N	-	-	-	07-10-2019	-	-	Planning completed
<input type="radio"/> EGHU9702910	N	N	N	-	-	-	07-10-2019	-	-	Planning completed
<input type="radio"/> TGBU6965599	N	N	N	-	-	-	05-10-2019	-	-	Planning completed
<input type="radio"/> DFSU6964029	N	N	N	-	-	-	05-10-2019	-	-	Planning completed

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Update final delivery details

EQUIPMENT DELIVERY

1 selected

Transport mode	Transport type	Haulier	Sent	Pickup	Date/Time	Drop-off	Date/Time	Reference
<input checked="" type="radio"/> Rail	OutPort	CZ/Ceva	N	Rotterdam	-	Nuremberg	-	-
<input type="radio"/> Storage	InlandDepot	CZ/Ceva	N	Nuremberg	-	Nuremberg	-	-
<input type="radio"/> Truck	DropAndswap	NL/Ceva	Y	Nuremberg	-	Bor u Tachova	-	-
<input type="radio"/> Truck	EmptyReturn	CZ/Ceva	N	Bor u Tachova	-	Nuremberg	-	-

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DELIVERY

DELIVERY FAILURE

NON CONFORMANCE

Comments

Clicking "Update actuals" (once a record is selected) will show the below screen:

Update estimates

Transport mode Transport type Haulier

Pickup location Pickup date

Drop-off location Drop-off date

TO sent

Delivery reference

Comment

All of these should be available in a bulk upload function

Drop-down values:

1. Transport Mode: Truck, Barge, Rail, Storage
2. Transport Type: transport type are unique per transport mode.

Transport Mode	Transport Type
Truck	Gas check, Fumigation, Inland Depot, Shunt, Out Port, Drop and swap, LiveTip, MilkRun, Empty return, DeRig, Dark Storage
Barge	Out Port, Inland Depot
Rail	Out Port, Inland Depot
Storage	Inland Depot, Dark Storage, Decon Warehouse, DeRig

3. Haulier: CEVA, Damco, Maritime Transport

Users want to have a bulk upload functionality via an Excel file where they can update or insert multiple records via one Excel file.

We would like to see:

1. How would you write this as a user story/use case/business scenarios?
2. Include acceptance criteria
3. What questions/clarifications do you need to further ask business, if any?
4. Draft Excel template that you would propose to business
5. Provide any comments/suggestions to improve the scenario presented above

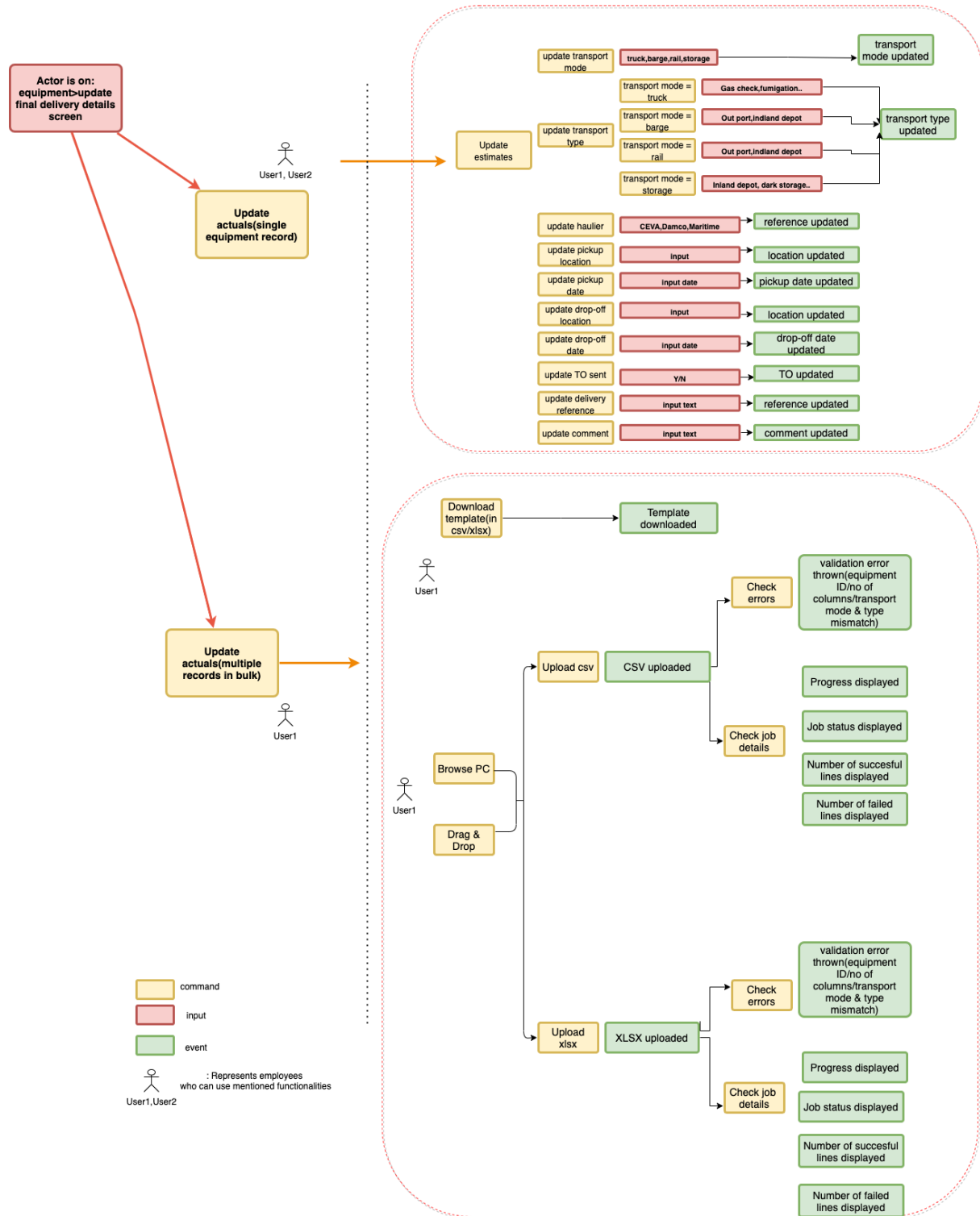
You can use MS Word, Notepad, Excel or similar application.

Candidate Name:Irem Burcin Milli

Date: 13.09.2021

Answers

1- Event storming diagram of use cases for single and bulk update:



2- User stories and acceptance criteria(some of the requirements added as assumption with relevant AC)

ReqID	Requirement	User Story	Acceptance Criteria	Scope
UC1	Button for bulk upload process should be added to FE	As a user,I would like to have option to bulk update estimates,so that I can perform my tasks efficiently	Given User1 has sufficient permissions When User1 is on equipment>update final delivery details screen Then User1 displayed with "Update actuals(multiple records in bulk)" button	MVP
UC2	Functionality to update single equipment estimates via FE screens should be kept available	As a user,I would like to still have the ability to update single record, so that I can	Given User1 has sufficient permissions When User1 is on equipment>update final delivery details screen Then User1 both displayed with "Update actuals(multiple records in bulk)" button and "Update actuals(single equipment record)" And user can perform single updates via screen	MVP
UC3	User should be able to browse/drag and drop the files for upload	As a user, I would like to browse my PC to be able to select the file for upload, so that I can complete the upload process successfully As a user, I would like to drag & drop file for upload, so that I can complete the upload process successfully	Given User1 is on equipment>update final delivery details screen When User1 hits "Update actuals(multiple records in bulk)" button Then User 1 should be able to browse PC folders for file in desired format And User1 can upload selected file from his/her PC Given User1 is on equipment>update final delivery details screen When User1 hits "Update actuals(multiple records in bulk)" button Then User 1 should be able to drag & drop file in desired format And User1 can upload selected file from his/her PC via drag & drop	??
UC4	User should be able to browse/drag and drop only a single file for upload	As a developer,I would like to limit the file upload to a single file in given format, so that I can ensure the proper process	Given User1 hits "Update actuals(multiple records in bulk)" button When User1 selected multiple files for upload Then User 1 should be prompted with an error And User1 cannot upload multiple files at the same time	MVP
UC4	User should be able to upload file only in csv/xlsx format	As a developer,I would like files to be in defined format, so that I can ensure the proper process	Given User1 hits "Update actuals(multiple records in bulk)" button When User1 selected xls,txt for upload Then User 1 should be prompted with an error And User1 cannot upload formats rather than allowed formats(xlsx,csv)	MVP
UC5	File size should not exceed agreed size	As an analyst,I would like files to be uploaded in agreed size limit, so that I can ensure the performance of the process (e.g 5 MB's)	Given User1 hits "Update actuals(multiple records in bulk)" button When User1 selected a file exceeding agreed limit(e.g 5 MB's) Then User 1 should be prompted with an error And User1 cannot upload the file	

UC6	All 11 columns should exist in uploaded file	As a user I would like to have all the necessary fields within excel as columns,so that I can access all the fields I can update	Given FileY.csv does contain below columns columnno name 1 EquipmentNumber 2 TransportMode 3 TransportType When User1 uploads file Then User1 gets error "Please upload file in specified format"	MVP
UC7	Transport types should be correctly updated per relevant transport mode	As an analyst, I would like transport mode and type parameters to be updated properly in excel, so that I can make sure of data quality	Given FileY.csv does contain below columns transportmode transporttype truck Gas check, Fumigation, Inland Depot, Shunt, Out Port, Drop and swap, LiveTip, MilkRun, Empty return, DeRig, Dark Storage barge Out Port, Inland Depot rail Out Port, Inland Depot storage Inland Depot, Dark Storage, Decon Warehouse, DeRig When User1 updates transport mode and type Then User1 gets error "Transport type does not exist for given transport mode"	MVP
UC8	Equipment numbers uploaded should correspond to existing equipment numbers	As a developer I would like to validate the equipment numbers uploaded, so that I can ensure all records updated	Given Equipment with number "ABC1" does not exist When User1 is has uploaded file with equipment number "ABC1" Then User1 is displayed with error : "Row:20 Equipment number does not exist" And User1 is prompted row number information	MVP
UC9	Process status should be visible to users	As a user I would like to see upload status,so that I can be informed on how the process is concluded	Given user uploaded FileX.csv When user is on bulk upload screen Then user should be displayed progress in FE and any of the status Initiated Running Failed	MVP
UC10	Details of updated lines should be displayed to user	As a user I would like to details of successful and failed lines in uploaded file, so that I can be well informed	Given FileX.csv having 15 rows and is successfully processed When user is on bulk upload screen Then user should be displayed File Numberofsuccesfulrows Numberoffailedrows FileX.csv 10 5 And user should have details on failed rows Failedrowno 1,4,5,12,13	??
UC11	Upon process has been finished,user should be notified	As a user I would like to be notified when update process is finished,so that I can be informed from finished processes	Given user successfully uploaded FileX.csv When upload job is finished Then user should be prompted a notification in FE	??
UC12	Bulk update functionality should be performed only by users having certain role	As a stakeholder, I would like only some users having the bulk upload functionality, so that I can utilise performance of the platform and limit operation to privileged role	Given User2 has NO sufficient permissions When User2 is on equipment>update final delivery details screen Then User2 should not be displayed with "Update actuals(multiple records in bulk)" button But User 2 should be displayed "Update actuals(single equipment record)" And User 2 can perform single updates via screen	??

UC13	Template having pre-built validations should be able to download	As a user, I would like to have option to download the excel templates for upload, so that I can ensure I will upload the files in proper format	<p>Given User1 is on equipment>update final delivery details screen</p> <p>When User1 hits "Download template" button and selects a format</p> <p>Then User 1 should be able to download template in desired format(csv,xlsx)</p> <p>And User1 can fill in downloaded file</p>	??
UC14	Templates should have pre-built data validations	As a stakeholder/analyst, I would like to have the data validation built in on the downloaded excel templates, so that I can ensure the file format beforehand	<p>Given User1 have downloaded Template_xlsx1.xlsx</p> <p>When User1 fills in Transport Mode</p> <p>Then User1 should be prompted with validation list : Barge,Truck,Rail,Storage</p> <p>Then User 1 should be able to download template in desired format(csv,xlsx)</p> <p>And User1 can fill in downloaded file</p> <p>Given User1 have downloaded Template_xlsx1.xlsx</p> <p>When User1 fills in "Sent" column</p> <p>Then User1 should be prompted with validation list : Y,N</p> <p>Given User1 have downloaded Template_xlsx1.xlsx</p> <p>When User1 fills in "Haulier" column</p> <p>Then User1 should be prompted with validation list : Ceva,Damco,Maritime</p> <p>Given User1 have downloaded Template_xlsx1.xlsx</p> <p>When User1 fills in columns with dates(drop off dat, pickup date)</p> <p>Then User1 should be prompted with data validation on proper date format and validity</p>	MVP

3- Questions to business to further clarify:

Q1: What are the file formats business would like to have in bulk upload? csv,xlsx..?

Q2: Due to performance concerns, we'd need to limit the number of lines(or file size) in the single upload process. What could be a reasonable limit, based on the business need of this functionality? (later on to be checked w development team as well)

Q3: What would be the daily limit on the bulk upload process per user? (we would not want process to be abused by users)

Q4: Would you like to limit this functionality for the use of certain roles/roles only? Would we need to create a new role/permission to be able to use "bulk upload" functionality?

Q5: Should bulk upload process stop when any of the lines in uploaded excel failed to be updated? Or would you prefer to have the process running and report failed lines to the user after the process?

Q6: Depending on the technical/architectural db setup, we'd need to pause the subsequent updates(e.g if there is a running bulk upload process, an upload on estimates cannot be performed by other users).

Q7: Would you like to have in the future, audit possibilities on this functionality(e.g user name, uploaded file name, updated lines,date..)

Q8: Should user be notified when the background update process is finished?

Q9: What could be the character limit of the "delivery reference" and "comment" fields? Do they accept special characters etc?

Q10: Would users prefer drag & drop or would they like to have browse PC option when selecting a file for upload?

4. Draft Excel template

<https://docs.google.com/spreadsheets/d/15qdKu9lC9m9YNme2NcQz36kvZtwW48nMmsABDwseHtY/edit?usp=sharing>

5- Comments/suggestions to improve the scenario presented above

1- I would propose to display details of the bulk upload process:

- Job status: Initiated,running, failed,suspended
- Progress(when status is running): %80...
- Time elapsed: Time have been passed since job has been initiated by user
- Number of lines uploaded
- Number of lines failed(equipment ID for the failed lines)
- Number of successful lines

2- We could show the details of the failed records for better UX on this process, so that users can find the failed records and update those lines via single/bulk operation again.

3- As mentioned in Q7 and also above,perhaps after mvp I'd also research the need of auditing/version history with business on whether this is a functionality which is in heavy daily use by many users.So that this functionality can be added.

4- (depending on user group's need) I would add an epic to team's backlog for ready-bulk upload template in desired format(csv,xlsx) and a download functionality for this, so that a new user can benefit from downloading the file and using the file directly.(Until then template can be provided manually e.g via email)

5- I would also add an epic on the team's backlog to have a pre-validation on the equipment ID and also validation for transport mode vs transport type matches. (Until then, a template with excel data validation can be used)

