J. A. R. V. I. S.

FOR MBSE

Software Requirements Specification

JARVIS

Version:0.0.1

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Contents

Revision History

Name	Date	Reason For Changes	Version
JARVIS Team	30-10-2018	Pristine	0.0.1

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1. Introduction

This section gives a scope description and overview of JARVIS software developed for modelling system design in this SRS document. The purpose for this document is to give a detailed overview of the functional and technical details about JARVIS .

1.1 Purpose

The purpose of this document is to give a detailed description of the requirements for the "JARVIS" software. It will illustrate the purpose and complete declaration for the development of the system.

1.2 Scope

With the advancement in the field of information- and communication technologies emerges the development of intelligent technical systems (ITS). ITS need to integrate mechanical, electrical, and software components in order to realize adaptive, robust, anticipatory, and user-friendly behavior. With these objectives the scope of "JARVIS" is defined to provide an ease of understanding and a common framework for using model based system development software for all engineering disciplines. Also an additional enhancement to the developed models can be achieved through the recommendations provided by the MBSE assistance.

1.3 Definitions, acronyms, and abbreviations

Team	Description	Role
MPF	MultiPlatform Frontend	Frontend Services
Backend	Backend	Backend Services
AI	MBSE Assistance	Intelligence Services
AR/VR	Augmented Reality	Augmented Reality Services

2. Product Description

JARVIS for MBSE is a product developed for all users involved in Model Based System Engineering. User irrespective of their domain would be able to develop models in the MPF editor which is the products frontend to interact with the user by providing them with an ease to understand functionality and also with the enhanced user functionality in the form of recommendations. All user designed models would be stored in the backend and would be technically refined and developed into Sysml models with CONSENS profiling. MBSE assistance would provide recommendations for enhancing the model functionality based on the existing models. These user designed models can also be viewed in 3D perspective for deeper understanding of the models with the help of augmented reality devices. This product will be very useful especially during workshops and review process.

3. Specific requirements

This section contains all of the functional and quality requirements of the system. It gives a detailed description of the system and all its features. It also gives a description of the software and the communication interfaces of the system.

3.1 User Interfaces

An User Interface specification defines the rules of engagement for an user interacting with a specific page on a website or screen within an application.
JARVIS UI Editor provides an user with many facilities like Speech Recognition, Shape and Text Recognition by drawing and Drag and Drop toolbar.

JARVIS UI comes with different tabs and section in the left panel and a home button which allows user to navigate to Home page from any other page. Also, Drag and Drop feature allows user to drag and drop the desired Consens elements.

3.2 Software Interfaces

3.2.1 MPF

Multi-platform Editor can be installed in any device (Ex: Surface Hub) which runs on Windows 10.

3.2.2 Backend

Backend Server is setup using Java Spring Tool Suite and SQL database (XAMPP). JARVIS models can be viewed as UML models in Papyrus which is an additional plugin to eclipse. RPC protocols will be used to link the server with AI and will be used to carry out 2-way communication between server and AI.

3.2.3 AR/VR

The AR viewer is installed on a Microsoft HoloLens and is started from the main menu. After starting, it connects to the JARVIS server and retrieves information about the projects a user can keep working on via internet. The AR viewer does not interact with any other software.

3.2.4 AI

For AI, the models are stored in Knowledge Graph using neo4j and can be viewed in neo4j itself. The functionalities of AI can be visualized in the MPF editor and MPF is connected to AI via Backend.

3.4 Functional Requirements

This section includes the requirements that specify all the fundamental actions of the software system. The requirements are ranked in priority from 1 (high) to 4 (low).

3.4.1 MPF:(Functional Requirements added by - Sneha ,Daniel & Dharmendra)

Requirement Id : FR1
Requirement Title : Drag and Drop Feature to create the models
Requirement Description : A user should be able to use Drag and Drop feature to drag the defined Consens element from the toolbar to create the models.
Priority: 1

Requirement Id : FR2
Requirement Title : Shape recognition of consens elements

Requirement Description : Shapes like hexagons, rectangles, squares, circles and ellipsis should be recognized when drawn and replaced by its associated Consens element. The recognition process is started by clicking a button.
Priority: 2

Requirement Id : FR3
Requirement Title : Shape recognition of consens elements
Requirement Description : Shapes like hexagons, rectangles, squares, circles and ellipsis should be recognized when drawn and replaced by its associated Consens element. The recognition process is started on the fly once no user input is detected for a short period of time.
Priority: 3

Requirement Id : FR4
Requirement Title : Text recognition of handwritten text
Requirement Description : Handwritten text should be recognised by using alphabetical characters. Whenever user writes text on the canvas and clicks on recognise button, MPF should be able to recognise the written text and display the result to the user.
Priority: 2

Requirement Id : FR5
Requirement Title : Save the created project to Backend
Requirement Description : Projects created in the Multi-platform Editor should be able to get saved in the Backend for future use. There is a save option provided in the Menu present in the Top right corner of the screen. Save option should be clicked to save the current project which is created.
Priority: 1

Requirement Id : FR6
Requirement Title : Automatic save of created project to Backend
Requirement Description : Models created in the Multi-platform Editor should be automatically stored in the Backend for future use. The periodic time when to save the project can be defined in the user settings of the MPF. Also this functionality can be disabled or enabled in the user settings page.
Priority: 2

Requirement Id : FR7
Requirement Title : Load the existing model to Multi-platform Editor from Backend
Requirement Description : Whenever a user tries to open the existing model in the User Interface, user should be able to load them from the backend. There is an “Open project” button provided on the Home page and this must be clicked to display the list of projects present in the backend. User should select the desired project to open by clicking on the project name. By clicking the project, navigates to the environment page to display the environment model.
Priority: 1

Requirement Id : FR8
Requirement Title : Save the modified/updated models to Backend
Requirement Description : User must be allowed to load the existing models and update them in the Multi-platform Editor and should be able to save the updated models in the Backend for future use. There is a save option provided in the Menu present in the Top right corner of the screen. Save option should be clicked to save the modified model/project.
Priority: 1

Requirement Id : FR9
Requirement Title : Delete the existing models
Requirement Description : User must be allowed to delete the existing model and delete it in the Backend. There is a delete option provided in the Menu present in the Top right corner of the screen. Delete option must be clicked to delete the model/project and the project/model should be opened before clicking the delete option.
Priority: 1

Requirement Id : FR10
Requirement Title : Provide suggestion whenever a familiar model is being created
Requirement Description : MPF System should be able to provide suggestions received from backend which come from MBSE Assistant when a user tries to create a familiar model. The suggestions are provided via a button click.
Priority: 1

Requirement Id : FR11
Requirement Title : Provide suggestion whenever a familiar model is being created
Requirement Description : MPF System should be able to provide suggestions received from backend which come from MBSE Assistant when a user tries to create a familiar model. The suggestions are provided on the fly by MPF.
Priority: 3

Requirement Id : FR12
Requirement Title : UNDO/REDO function availability in the UI Editor
Requirement Description : UNDO/REDO function should be made available which is helpful to the user while drawing a model to reverse the last UNDO and REDO. UNDO and REDO symbols will be provided and they should be clicked to reverse the last UNDO or REDO.
Priority: 4

Requirement Id : FR13
Requirement Title : Text recognition of handwritten text on drawn Consens Shapes.
Requirement Description : When text is written over drawn shapes and the recognize button is clicked, the recognized result text should be connect to the recognized shape and is used as the elements name.

Priority: 4

Requirement Id : FR14
Requirement Title : Error - Consistency check
Requirement Description : Validation of created/modified models should be available. Whenever users draw incorrect models. User should be notified that the model drawn is incorrect by providing an error message on the screen.
Priority: 4

Requirement Id:FR15
Requirement Title: Create Element
Requirement Description: User should be able to create Element through speech in MPF
Priority: 2

Requirement Id:FR16
Requirement Title: Save Project
Requirement Description: User should be able to save Project through speech in MPF
Priority: 2

Requirement Id:FR17
Requirement Title: View Diagram
Requirement Description:-User should be able to view/open the functions, active structure through speech in MPF
Priority: 1

Requirement Id:FR18
Requirement Title: Search (web service)
Requirement Description: If a user has applications specific or model based questions that are not comprehensible or is unfamiliar with the user should be able to search online for it by using speech commands. His search command will open the default browser and show the results.
Priority: 3

Requirement Id: FR-19
Requirement Title: Delete Element
Requirement Description: User will search the element and recognize it and than be able to delete the element in MPF by calling. (Deleting single element)
Priority: 3

Requirement Id: FR-20
Requirement Title: Undo
Requirement Description: User should be able to do undo of last step/action through speech.

Priority: 4

Requirement Id: FR-21
Requirement Title: Create Project
Requirement Description: User should be able to start the new project by calling create project in MPF.
Priority: 4

Requirement Id: FR-22
Requirement Title: Name Project
Requirement Description: User must be able to give the name to project while creating the new project through speech.
Priority: 4

Requirement Id: FR-23
Requirement Title: Open Project
Requirement Description: User should be able to open the existing project by calling the name of project in MPF.
Priority: 2

Requirement Id: FR-24
Requirement Title: Model navigation
Requirement Description: User must be able to navigate model through interaction, like show function of weapon (element).
Priority: 4

Requirement Id: FR-25
Requirement Title: Connecting X and Y
Requirement Description: User should be able to create connection between elements X and Y with the connector type through speech.
Priority: 3

3.4.2 Backend (Functional Requirements added by - Hammad, Modifications by Priyanka)

Requirement Id: FR-1
Requirement Title: Create views on artifacts or view specific modeling / Completeness of Requirement
Requirement Description : User should be able to create customized views. Views are created in MPF and stored in Backend.
Priority: 3

Requirement Id: FR-2
Requirement Title: Evaluate Requirement Quality Consistency
Requirement Description : User should be able to check whether the requirements are consistent or not. The request will be received from MPF to Backend. Backend receives consistency information from MBSE Assistant and this data will be available to MPF. Requirement is consistent if it does not contain any inconsistent requirements.
Priority: 3

Requirement Id: FR-3
Requirement Title: Document traceability between Requirement and Architecture
Requirement Description : User should be able to get traceability between requirements and architecture i.e. linking CONSENS model with requirements and write them in a document stored in Backend and shown to users.
Priority: 3

Requirement Id: FR-4
Requirement Title : Get suggestions from MBSE assistance
Requirement Description : User should be able to get suggestion about the components of the model when they click on Recommendation button in MPF. Backend reads the “Recommendation” request received from MPF and sends request to MBSE Assistance to provide the recommendations. MBSE Assistant would provide suggestion to backend and sent it to MPF.
Step 1: Achieve a 2-way communication through RPC connection between server (which would act as client) and MBSE Assistance (which would act as server).
Step 2 : Send the JSON file to MBSE Assistance.
Step 3: MBSE Assistance stores the models and checks for recommendations to be provided.
Step 4: MBSE Assistance send the Recommendations to Backend through JSON file and Backend sends it to MPF

OR

A recommendation message will be send directly after the user clicks on the “Recommendation” button to MBSE Assistance. (Backend will have no role to play here since the recommendations would be coming from MBSE Assistance)
Priority: 1

Requirement Id: FR-5
Requirement Title: Save models from MPF to Backend
Requirement Description : User should be able to save models developed in MPF in Backend which can be later received by users to reuse it through MPF. Backend will store it in form of a specific project.
Priority: 1

Requirement Id: FR-6
Requirement Title: 3D views of the models are made available
Requirement Description : User should be able to see models and 3D views. For this purpose, backend will provide JSON file to AR/VR
Priority: 1

Requirement Id: FR-7
Requirement Title: When backend receives new models that are already fully/partially present, it should update the existing models accordingly
Requirement Description : User should be able to draw new models or update already developed models. Database within MBSE Assistant will check whether the model is fully or partially present in it based upon timestamps. Then amend old models accordingly.
Priority: 1

Requirement Id: FR-8
Requirement Title: Delete models from Backend when request is received from MPF
Requirement Description : Project with the corresponding ID received from MPF must be deleted from the backend.
Priority: 1

Requirement Id: FR-9
Requirement Title: Convert the consens model received from MPF as JSON to UML
Requirement Description : Backend will convert the consens model received from MPF as a project to the corresponding UML models
Priority: 1

Requirement Id: FR-10
Requirement Title: Convert the SYSML models residing in Backend in UML format to JSON
Requirement Description : Backend will convert the UML model residing in Backend as a project to the corresponding Sysml models
Priority: 1

Requirement Id: FR-11
Requirement Title: Implement RPC
Requirement Description : Create an RPC between backend and MBSE assistant. Any new/updated model received by the backend from the MPF must be forwarded to MBSE assistant as JSON to create/update the knowledge Graph accordingly and the recommendation received from MBSE.
Priority: 1

3.4.3 AI:

Requirement Id:FR-1
Requirement Title: Store models
Requirement Description: System should be able to store the models in the form of a knowledge graph when there is any update or a new model is created in the backend.
Priority: 1

Requirement Id:FR-2
Requirement Title: Recommendations/Suggestions
Requirement Description: User should be able to get the recommendation for adding the next element in the model if they click a Recommendation button.
Priority: 1

Requirement Id:FR-3
Requirement Title: Updating existing Models
Requirement Description: When we receive new models that are already fully/partially present , the knowledge graph should update the existing models accordingly
Priority: 1

Requirement Id:FR-4
Requirement Title: Semantic Check
Requirement Description: For any element to be searched in the knowledge graph, the element with the same semantics should also be considered for better recommendations/suggestions.
Priority: 3

3.4.4 AR viewer:

Requirement Id: FR1
Requirement Title: Fetch and Display all projects.
Requirement Description: The AR viewer component should fetch all projects stored in the Backend.
Priority: 1

Requirement ID: FR2
Requirement Title: User should be able to select a particular project.
Requirement Description: A user should be able to select a project to see the models.
Priority: 1

Requirement ID: FR3
Requirement Title: Show the same model as MPF in AR
Requirement Description: When a model is created in the MPF and saved to the backend, the same model should be shown when loading it from the AR viewer. No model elements get removed or added when loading a model in the AR viewer.
Priority: 1

Requirement ID: FR4
Requirement Title: User should be able to view models in different angles.
Requirement Description: A user should be able to view the displayed SysML model in the hololens from any given angle i.e as he changes the position the view of the model should change respectively
Priority: 3

Requirement ID: FR5
Requirement Title: 3-D view of the models can be made available.
Requirement Description: A user should be able to view all the models that are stored in the database. The user than should be able to select any of the model and it should then be converted and displayed in a 3-D format in Hololens.
Priority: 1

Requirement ID: FR6
Requirement Title: Select any other project while observing models of a Project.
Requirement Description: A user should be able to view select any other Project while observing the

models of a Project.
Priority: 4

Requirement ID: FR7
Requirement Title: Fast switch between different views and model types
Requirement Description: A user should be able to view all different types of models that have been created and saved in a project. The user should be able to switch back and forth between these models and also should be able to drill into details of elements present in those models.
Priority: 3

Requirement ID: FR8
Requirement Title: Permission on models must be followed by users
Requirement Description: A user should be able to view the models that he/she has access to.For example The user should not be able to edit a model in a project for which he only has the rights to "read"
Priority: 2

Requirement ID: FR9
Requirement Title: Traceability within AR
Requirement Description: A user should be able to see how the elements of the different submodels are connected. For example, it should be possible to see which requirement is behind a system element.
Priority: 3

Requirement ID: FR10
Requirement Title: Voice notes for model elements
Requirement Description: A user should be able to record their voice to give hints about a model element. A note should be applied to the respective element and it should be possible to hear it again later.
Priority: 4

Requirement ID: FR11
Requirement Title: Support of Color blind people
Requirement Description: User should be able to set preference for the color of the models.
Priority: 4

3.5 Technical Requirements

This section includes the requirements that specify all the technical actions of the software system

3.5.1 MPF (Technical Requirements added - Sneha, Modifications by Daniel)

Requirement Id : TR1
Requirement Title : Create new project
Requirement Description : Home screen should allow the user to provide the project name in the case of new project. There should be a tab to intake the project name and there should be a button named "Create new Project".
Click on this button "Create New Project" should send the project name to the backend.
Based on the response received, user must be notified with the pop up stating that the new project has been created successfully or that there was some error in creating new project.
Priority: 1

Requirement Id : TR2
Requirement Title : Save the CONSENS model
Requirement Description : Provide a panel in the top right corner. On the click of this panel, User should be able to see the save, save as option.
Click on the save should send the model information in the predefined JSON format to the backend along with the project ID.
Priority: 1

Requirement Id : TR3
Requirement Title : Delete the CONSENS model
Requirement Description : Provide a panel in the top right corner. On the click of this panel, User should be able to see the delete option.
Click on this delete option should delete the project details of the CONSENS model from the backend.
Priority: 1

Requirement Id : TR4
Requirement Title : Recommendations/Suggestions button
Requirement Description : MPF System should be able to provide suggestions received from backend which come from MBSE Assistant when a user tries to create a familiar model. The suggestions are provided on the fly by MPF.
Priority: 2

Requirement Id : TR5
Requirement Title : Speech Recognition

Requirement Description : Audio icon is made available in the MPF UI editor.
Whenever an user wants to develop models through speech, the Audio icon must be clicked.
Below are the few commands that should work in the MPF speech recognition feature,

Draw System Element - System element should be drawn on the Canvas.
Draw Environment Element - Environment element should be drawn on the Canvas.
Go to X - navigate to the X screen of page.

Priority: 1

Requirement Id : TR6
Requirement Title : Shape Recognition of Consens elements by clicking recognition button
Requirement Description : Recognition symbol must be selected whenever an user expects the MPF to recognize the CONSENS elements drawn.
User must draw the CONSENS element on the canvas and click the Recognition symbol.
On the click of Recognition symbol, the CONSENS element drawn will be recognised and displayed.
Priority: 2

Requirement Id : TR7
Requirement Title : Shape recognition of consens elements on the fly
Requirement Description : Shapes like hexagons, rectangles, squares, circles and ellipsis should be recognized when drawn and replaced by its associated Consens element. The recognition process is started on the fly once no user input is detected for a short period of time.
Priority: 3

Requirement Id : TR8
Requirement Title : Text Recognition
Requirement Description : Recognition symbol must be selected whenever an user expects the MPF to recognize the handwritten text.
User should write the text and click the recognition symbol.
On the click of Recognition symbol, the CONSENS element drawn should be recognized.
Priority: 2

Requirement Id : TR9
Requirement Title : Speech Recognition
Requirement Description : A user must be able to create the Consens model through speech by giving the instructions and also through speech, user must be able to switch between the screens.
Whenever user wants to develop models through speech, the Audio icon must be clicked.
Below are the few commands that should work in the MPF speech recognition feature,

Draw System Element - System element should be drawn on the Canvas.
Draw Environment Element - Environment element should be drawn on the Canvas.
Go to X - navigate to the X screen of page.l

Priority: 3

Requirement Id : TR10
Requirement Title : Restrict the shapes available in the Drag and Drop toolbar
Requirement Description : Limit the elements shapes to the elements of CONSENS partial models. Only the Consens elements should be made available in the Drag and Drop toolbar.
Priority: 1

Requirement Id : TR11
Requirement Title : Separate screen/page for each partial model modelling
Requirement Description : It is recommended to have the separate screens/ page (like Environment for creating environment model etc.) for each partial model development. The navigation to these screens should be possible from any screen.
Priority: 2

Requirement Id : TR12
Requirement Title : Settings icon should be available on the navigation panel
Requirement Description : Settings icon should be present on the navigation panel. Clicking on the settings icon should navigate to settings screen.
Priority: 4

Requirement Id : TR13
Requirement Title : Help and info icons should be available on the navigation panel
Requirement Description : On the click of help and info icons, user should be able to get help from offline by providing the more information on the usage of the UI Editor and should get the CONSENS related information respectively
Priority: 3

Requirement Id : TR14
Requirement Title : Connection with Backend
Requirement Description :

1. MPF should be able to connect via a HTTP connection to the backend.
2. MPF should be able to receive the project id for the creation of new project by sending the project name to the backend.
3. Backend creates a project id and sends that to MPF.
4. The created/updated CONSENS model should be send in the JSON format to the backend via the HTTP connection.

Priority: 1

3.5.2 Backend: (Technical Requirements added - Priyanka)

Requirement Id : TR1
Requirement Title : Create Project ID and send to MPF
Requirement Description : In Backend, a Project ID is created and send to the MPF when a new project is initiated in MPF
Priority: 1

Requirement Id : TR2
Requirement Title : Save Project details send by MPF in Server
Requirement Description : In Backend, the Project is stored in the form of JSON with all the information about model elements in a server location.
Priority: 1

Requirement Id : TR3
Requirement Title : Send all Project details requested by MPF.
Requirement Description : Backend will send all the project ids and file locations of the JSON file stored in the server.
Priority: 2

Requirement Id : TR4
Requirement Title : Send all Project details requested by MPF based on project ID.
Requirement Description : Backend will send the project details based on project ID and file location of the JSON file stored in the server.
Priority: 2

Requirement Id : TR5
Requirement Title : Delete a Project based on Project ID requested by MPF.
Requirement Description : Backend will delete the project based on project ID from the Database and also the respective JSON file stored in the server.
Priority: 1

Requirement Id : TR6
Requirement Title : Activation of Server
Requirement Description : In Backend, there should be a server that would store the models and process the request and response to and from other components
Priority: 1

Requirement Id : TR7
Requirement Title : Store Information in Database

Requirement Description : There should be a database in Backend which would store all important information regarding models and projects like modification date, creation date,project name, project modification date and so on.
Priority: 1

Requirement Id : TR8
Requirement Title : Mapping from JSON to UML and vice versa
Requirement Description : The model will be received in form of JSON from MPF so it should be converted to UML within Backend and converted back to JSON when communicating with other components.
Priority: 1

Requirement Id : TR9
Requirement Title : Internal communication between Backend and other client machines
Requirement Description : Backend should be able to internally use RPC to call instance of applications to connect it with server to retrieve models then interchange between JSON and UML.
Priority: 1

Requirement Id : TR10
Requirement Title : Recommendations/Suggestions request received from MPF
Requirement Description : On receiving the recommendation request from the MPF the server must connect to the respective client machine using RPC protocols and get the suggestions from the MBSE assistance and send these suggestion to MPF back through http request.
Priority: 2

Requirement Id : TR11
Requirement Title : Conversion of CONSENS models to sysml models
Requirement Description : Backend should be able to design sysml models with the help of the json files received from the MPF and apply the CONSENS stereotype to sysml .
Priority: 1

3.5.3 AI:

Requirement Id : TR1
Requirement Title : Speech Recognition in MPF
Requirement Description : The list of commands that should work in the MPF editor after recognizing the speech are below :

1. Save and close : the model should be saved and closed in the MPF editor
2. Save as : the model should be saved as pdf, doc.

3. Export as : the model should be saved as pdf, doc.
4. Open X view : the X view here means the Model view, Requirement sheet
5. Undo operation : the System should undo the previous work
6. Select “X” element : X is the name of the element existing in the model
7. Rename “X” element to “Y” : the element with the name X should be replaced with Y
8. New Project : a new project should be created
9. Open Project X : an existing project with the name X should be opened
10. Change the type of element : For example, an environment element could be changed to a System element

Priority: 2

Requirement Id : TR2
Requirement Title : Recommendations / Suggestions button
Requirement Description :

1. This button should be available in the MPF editor. When clicked on this button, the recommendations should be shown in the MPF editor.
2. The knowledge graph should be updated according to the information stored in the backend.
3. The system should retrieve the newest project id and provide the recommendations based on the updated records.

Priority: 2

Requirement Id : TR3
Requirement Title : Shape Recognition
Requirement Description :

1. All the types of elements and connections present in the Backend model should be identified by the MPF editor.
2. The shapes of the elements should be restricted based on the Consens elements.
3. The shapes should be identifiable and similar to the one present in the backend.

Priority: 2

Requirement Id : TR4
Requirement Title : Text Recognition
Requirement Description :

1. The text written in the MPF editor should be recognized .
2. After recognition, the text could also be edited to change.
3. The text should be recognized separately in the MPF editor and together if its written inside any shape.

Priority: 2

Requirement Id : TR5

Requirement Title : Connection with Backend
Requirement Description :

5. Neo4j should be able to connect via an HTTP connection to the backend and fetch project id's
6. Based upon the requested id, the Backend should return the requested project as a JSON file
7. The created/updated knowledge graph should be exportable to the backend via the HTTP connection

Priority: 1

3.5.4 AR viewer:

Requirement Id : TR1
Requirement Title : Hardware to work on
Requirement Description : The AR viewer component of JARVIS should be working on Microsoft HoloLens.
Priority: 1

Requirement Id: TR2
Requirement Title: Internet Connectivity.
Requirement Description: The AR viewer component should have constant Internet Connection.
Priority: 4

Requirement Id : TR4
Requirement Title : No delay in showing the model
Requirement Description : When the AR viewer shows a model and the model elements are moved in some way, the transition should work fluidly and there should be no delay in showing the model elements on different positions.
Priority: 3

Requirement Id : TR4
Requirement Title : Hint for users to find out the model position
Requirement Description : There should be hints in the AR Component so that user can easily find the rendered models.
Priority: 3