Goals

Provide a tool to capture use cases, requirements & more for the AREA ecosystem

Encourage the creation of contextualized and tagged content

Make this context valued by and accessible to the AREA community

Encourage a collaborative environment

*Provide a managed, rich source of valuable content for AR solution users and suppliers*
Key Concepts

Database is online and accessible to the AREA community

Adheres to the AREA Schema of Needs

Two views of the system:

• The **registered user**
  • Submit content for approval
  • Search
  • Comment
  • Report

• The **Admin user** (aka Requirements Committee members)
  • User privileges plus...
  • Configuration
    • Users, Settings, Industries, Tags, Personas, Templates, Admin users
  • Content approval

Rich text editing of content and simple linking to other content

Content subscription with automated notifications model

Mobile friendly
Key Capabilities

User’s View of the System
Consistently structured content is encouraged:
• Business scenarios
• Use cases
• Requirements / needs
• Value propositions
• Personas
• Submitted content is subject to a review process

Rich text editing (include links, images, etc.)
• Commenting to encourage collaboration
• Streamlined referencing to existing
• Subscribe and notify model
• Use pre-defined templates

Bulk loading of content
• From CSV file

Comprehensive search capabilities
Reporting
User self registration

Admin’s View of the System
Maintain list of admins and users

Define list of tags and tag groups

Define set of Industries
• e.g. Automotive, Aerospace

Define usage Settings
• e.g. Factory, Field, etc.

Define Personas
• e.g. Field Service Technician

Define Templates for all content types

Define notification email lists

Review and Approve content submissions
User Capabilities
User’s initial screen

https://areareqs.firebaseapp.com

Contact Michael@thearea.org for admin privileges (needs a gmail account)
User’s home screen

Welcome to the AREA requirements management.

Currently Managing:
2 Scenarios
3 Use Cases
51 Requirements
1 Value Propositions

Search tools
Overview of approved content in database
Content types

Login for admin users
Searching
Search expressions

Build compound search strings (in addition to use of tags) e.g.

- `*`
  - Find everything!
- `AP* [and] [-]APP*`
  - Find items with words beginning with AP but not with APP
- `Hololens [OR] ODG`
  - Find items that include the “Hololens” or “ODG”

These can be saved for later re-use
Advanced Search UI overview (1)

**Tags**

- Search by user (name/email address)
- Collapsible group display
- Logical operator within this group
- Admin-defined tag groups

**Saved searches:**
- Capture all tags
- Include search string
- Individual to user
Advanced Search UI overview (2)
Example search – within REQUIREMENTS

- Multi-selection to edit Settings, Tags, etc.
- Title of requirement = link to content item
- Simultaneous editing of tags for multiple items
- Simple text field search
- Select to search in this context
- Get the link to this requirement
- Edit this requirement
Viewing
Viewing a requirement

**API links to other databases**

The toolkit shall provide links to other databases to enable the retrieval of information from enterprise business systems.

**Examples include:**
1. Retrieval of meta-data
2. Stock count
3. Material parameters

**Tags**
- Connectivity
- Bluetooth
- Sensors
- Audio
- Video
- RFID

**Settings**
- Engineering development
- Factory operations
- Field service and repair

**Industries**
- Aerospace & defense
- Automotive
- Industrial equipment
- Shipbuilding
- Life sciences
- Consumer goods & high tech
- Smart cities
- Toys and games
- Footwear and apparel
- Process industries
- Other

**Commenting**

Add your comment
Viewing a use case or scenario

**Cabin Crew Workflow**

AR-assisted cabin crew workflows use any technology for creation, detection, recognition and rendering. Display options that permit professionals to use both hands are highly preferred. The user interface must include speech recognition, user interface recognition, and eye-gaze recognition.

Integration of AR-assisted cabin crew workflows with travel record management systems in some scenarios and systems is desirable.

**Tags**

- Apps
- Device
- Interaction
- UX
- Tracking
- Sensor usage
- Analytics
- IoT
- Table
- Eyewear

**Settings**

- User operations
- Interactive user instructions

**Industries**

- Aerospace & defense
- Shipbuilding

**Linked Requirements**

- User interface for non-software literate users
  - *Shall support the ability for the user to lock the 3D AR content (not allow the worker to modify location using Tracking method)
- For smart devices with touch screen

**Popup to view requirement in content**

*For smart devices with touch screen*

The worker shall be allowed to use "pinch" gestures for zooming

**Auto-generated list of referenced requirements**

Link to requirement
Notifications
Email notifications occur on content item **creation** (e.g. scenarios, use cases) to:

- Admin accounts
- Selected users (list maintained by an admin)

**Item edits** send notifications to:

- Admin accounts
- Selected users (list maintained by an admin)
- The content creator
- Item subscribers

**Comment creation** sends notifications to:

- Admin accounts
- The content creator
- Item subscribers
- Previous commenters
Commenting
Commenting

Comment thread

Michael F. Rygol 10/07/2018 11:53 AM
This is a first comment on this requirement.

Michael F. Rygol 10/07/2018 11:53 AM
This is a second comment on this requirement.

Add your comment

POST

Automated email notification

Includes recent comment text.
Submitting Content
Bulk upload supported for all item types:

• Scenarios, Use cases, Requirements, Value propositions
• CSV file format:
  • [title], [description] 
• Excel is a good way to prepare existing lists to save to CSV

All item submissions and edits are sent for approval
Submitting an item

1. Enter title
2. Choose template (if required)
3. Enter description
4. Select relevant Industries (optional)
5. Select relevant Settings (optional)
6. Select relevant Tags (optional)
7. Click SAVE

All item submissions and edits are sent for approval (except comments)
Linking to other content (e.g. requirements within a use case)

1. Enter link text to be shown (optional)
2. Right Mouse Button menu and select item type
3. Start typing
4. Select from auto-populated list that match the text typed and hit return. Hyperlink is embedded within the text.
Reporting
Reporting Search Results to PDF & CSV

- Export selected items from search results to a PDF (via a browser)
- Export selected items to a CSV file (import into Excel, etc.)
- Embeds links to items within the report
- Additional optional info for report
Save search results to PDF & CSV reports

API links to other databases

The toolkit shall provide links to other databases to enable the retrieval of information from enterprise business systems.

Examples include:
1. Retrieval of meta-data
2. Stock counts
3. User interface for non-software literate users

Notes:
- Uses browser ability to write to a PDF driver.
- You’ll need to enable the popup from the tool
Admin Capabilities

Accessible to Admin Users only
Admin home screen

Welcome to the AREA requirements management.

Currently Managing:
- 19 Scenarios
- 10 Use Cases
- 125 Requirements
- 12 Value Propositions

Activity Report

From 06/08/2018 To 04/02/2019

Items Added
- 19 Scenarios
- 7 Use Cases
- 72 Requirements
- 12 Value Propositions

Items Approved
- 10 Scenarios
- 0 Use Cases
- 0 Requirements
- 0 Value Propositions

Time period (defaults to one month ago to 'today')

Submitted content counts

Links to lists of updated content items

Approval counts

Overview of approved content in database
Flagging content for review

Content flagged for review will return to the list of items to be approved by the committee
### Pending Items on the Admin’s Home Screen

#### Grouped according to Item Type

<table>
<thead>
<tr>
<th>Title</th>
<th>Description</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product Design</td>
<td></td>
<td>APPROVE, EDIT, REJECT</td>
</tr>
<tr>
<td>Flight Path Visualization</td>
<td></td>
<td>APPROVE, EDIT, REJECT</td>
</tr>
<tr>
<td>Cabin Crew Workflow</td>
<td></td>
<td>APPROVE, EDIT, REJECT</td>
</tr>
</tbody>
</table>

#### Backlog of items to approve

<table>
<thead>
<tr>
<th>Title</th>
<th>Description</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Committee actions</td>
<td></td>
<td>APPROVE, EDIT, REJECT</td>
</tr>
</tbody>
</table>

#### Pending for Approval

<table>
<thead>
<tr>
<th>Title</th>
<th>Description</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emergency Response</td>
<td>Emergency ResponseAR-assisted emergency response supports p</td>
<td>APPROVE, EDIT, REJECT</td>
</tr>
<tr>
<td>Placement of equipment in bar cellar as part of system of record</td>
<td>Often, during the layout of cellar equipment for a bar, hole</td>
<td>APPROVE, EDIT, REJECT</td>
</tr>
<tr>
<td>AR for Training – Overview Use Case</td>
<td>Overview of use caseThe AR solution provides trainers with a</td>
<td>APPROVE, EDIT, REJECT</td>
</tr>
</tbody>
</table>

#### Pending Requirement

<table>
<thead>
<tr>
<th>Title</th>
<th>Description</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ability to place 3D models in physical context</td>
<td>The system shall provide the ability to place a selected 3D</td>
<td>APPROVE, EDIT, REJECT</td>
</tr>
<tr>
<td>Ability to capture a view of a 3D model within a physical scene</td>
<td>The system shall provide the ability to capture an image of</td>
<td>APPROVE, EDIT, REJECT</td>
</tr>
</tbody>
</table>

#### Pending Value Propositions

<table>
<thead>
<tr>
<th>Title</th>
<th>Description</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reduce knowledge transfer costs from an ageing and retiring workforce</td>
<td>The use of AR will help to reduce the costs of transferring</td>
<td>APPROVE, EDIT, REJECT</td>
</tr>
<tr>
<td>Improvements to traceability and auditability</td>
<td>The use of AR shall improve the organisation's ability to en</td>
<td>APPROVE, EDIT, REJECT</td>
</tr>
</tbody>
</table>
Thank you