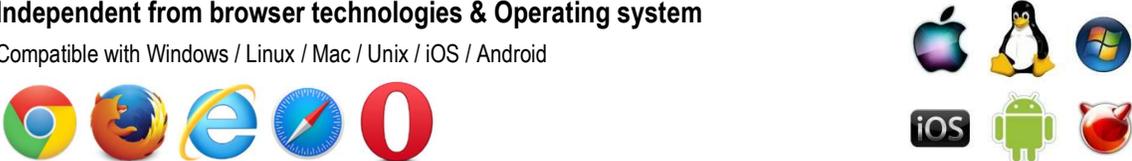
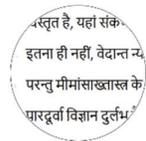
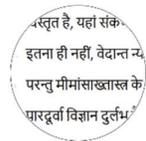
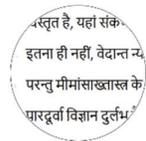


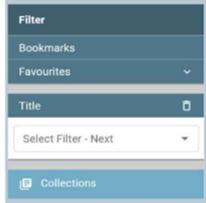
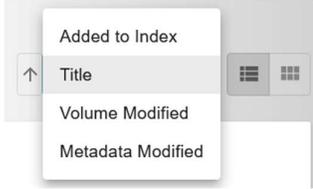
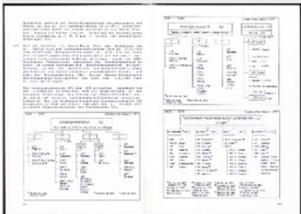
FEATURES & ADVANTAGES

NAINUWA[®] X² Features & Advantages (part 1)		
<p>The NAINUWA[®] X² system is built on open source software technologies</p> <p>All technologies are combined in a unique and innovative combination & configuration within the NAINUWA[®] X² system. Together with a responsive frontend design NAINUWA[®] X² represents the Cutting-Edge-Technology for future digital libraries with a full support of HTML 5.</p>	 <p>open source</p>	✓
<p>Guaranteed search server performance</p> <p>It will be guaranteed that a simple search query (= one word, max. 15 characters) will be treated and provided from the NAINUWA[®] X² search server within max. 500ms. The search query shall be directly sent to the Solr-search server and the measurement does not include the transfer to the inquiry client. The measurement is defined as the value which is provided by the Solr-server debug-mode.</p>		✓
<p>Independent from browser technologies & Operating system</p> <p>Compatible with Windows / Linux / Mac / Unix / iOS / Android</p> 		✓
<p>No App required</p> <p>Apps need to be updated regularly and look different on different systems. For similar appearance Nainuwa[®] X² is web based.</p>		✓
<p>MULTIMEDIA - ALL CONTENT ON ONE PLATFORM</p> <p>NAINUWA[®] X² enables to upload various media types & formats and is in compliance with IIIF:</p> <ul style="list-style-type: none"> + Books, newspapers, magazines + Documents, images, photos, maps, etc. + PDF, JPG, TIF, WORD etc. + Video & audio (optional) + 3D objects (optional) 		✓
<p>Responsive frontend design for desktop / tablet / smartphone</p> <p>The NAINUWA[®] X² system will automatically adapt to the available screen size of the used devices like a desktop, tablet, or smartphone.</p>		✓
<p>Multi language frontend navigation module</p> <p>This feature allows users to switch between different languages for the interface, enhancing accessibility and user experience. It enables to navigate the system in the preferred language and ensures that the archive's content is accessible to a global audience.</p> <p><i>Annotation: The administration area will be available in English language only due to support reasons.</i></p>		✓
<p>Login area & Automated user registration form</p> <p>The standard user rights include user registration and three levels of users:</p> <ol style="list-style-type: none"> user with no login (same rights for all users) user with login (same rights for all users) administrator <p>For complex user rights and user groups the module "User rights & Content access management" is included</p>		✓

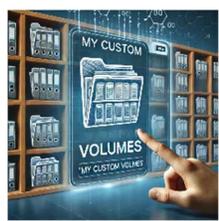
FEATURES & ADVANTAGES

NAINUWA® X² Features & Advantages (part 2)										
<p>Collection, Volume & Image import administration</p> <p>(Based on Nextcloud) Create customized collections with individual selected volumes. With the “User rights & Content access management” the access to the collections can be exactly set.</p>		✓								
<p>Metadata Editor & Migration tools</p> <p>The Metadata Editor and Migration tools allow content administrators to create, modify and standardize metadata across the platform. These tools facilitate the accurate organization and categorization of content. Migration tools ensure smooth transfer of data between systems, preserving metadata integrity and supports the integration of any international descriptive metadata standards such as e.g. Dublin Core, MODS, MARC, etc.</p>		✓								
<p>User rights & Content access management</p> <p>The User Rights & Access Management within NAINUWA® X² ensures secure and efficient control over who can view, edit or manage archived content. It involves setting permissions based on user roles, maintaining data integrity, preventing unauthorized access and ensuring compliance with legal and organizational policies. Proper management enhances system security and usability.</p>		✓								
<p>Monitoring & statistics OpenSearch® dashboard</p> <p>NAINUWA® X² offers an interface to the open-source OpenSearch® analytics engine. This enables useful insights into user activity and document access. Metrics such as the number of views, downloads and search queries can be created. This supports administrators to monitor user behaviour and optimize content.</p>		✓								
<p>AI - POWERED OCR (Optical Character Recognition)</p> <p>NAINUWA® X² offers OCR processing by using bleeding-edge Artificial Intelligence models. Game changing benefits are:</p> <ul style="list-style-type: none"> + Over 190 available languages + Gothic/Fraktur recognition + Arabic, Chinese, Japanese, Vietnamese, Korean etc. + Handwriting recognition 	<table border="0"> <tr> <td>ORIGINAL IMAGE</td> <td>AI-OCR RESULT</td> </tr> <tr> <td></td> <td></td> </tr> <tr> <td>ORIGINAL IMAGE</td> <td>AI-OCR RESULT</td> </tr> <tr> <td></td> <td></td> </tr> </table>	ORIGINAL IMAGE	AI-OCR RESULT			ORIGINAL IMAGE	AI-OCR RESULT			✓
ORIGINAL IMAGE	AI-OCR RESULT									
										
ORIGINAL IMAGE	AI-OCR RESULT									
										
<p>Search field with auto complete & Search by multiple tags</p> <p>The auto complete feature is enabled after the third character of the search query.</p>		✓								

FEATURES & ADVANTAGES

NAINUWA [®] Features & Advantages (part 2)		
<p>Search by facets / filters (Metadata)</p> <p>This feature enables users to refine search results by applying specific criteria such as date, author, document type or keywords. It helps narrow down vast datasets, making it easier to find relevant information quickly and efficiently.</p>		✓
<p>Sort options & search inside a book</p> <p>Sort: Ascending or Descending by: Title, added, modified</p> <p>Views: List View & Tile View</p>		✓
<p>View of the search results</p> <p>(with stepless zooming at any system stage)</p> <p>Direct preview at any stage in a digital archive system allows users to instantly view documents without fully opening them. This feature speeds up the review process, enabling quick assessments of content during various stages of work.</p> <p>The stepless zoom allows users to smoothly and precisely adjust the magnification of documents and images. This feature provides enhanced viewing control and detail exploration.</p>		✓
<p>Highlighting</p> <p>(word based) of the fulltext & metadata hits</p> <p>NAINUWA[®] X² enables highlighting of full-text as well as metadata hits. This enhances search functionality by visually marking relevant search terms in documents and metadata fields. This feature helps users quickly locate important information within vast amounts of data, improving navigation and efficiency in accessing the desired content within the archive.</p>		✓
<p>Show & Copy text feature</p> <p>(copy & paste of available OCR-text from the previewed page)</p>		✓
<p>Single Page & Bookreader viewer (with stepless zoom)</p>	<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">   </div> <div style="text-align: center;">   </div> </div>	✓

FEATURES & ADVANTAGES

NAINUWA® X² Features & Advantages (part 4)		
<p>Full Screen view For high resolution images or full screen view on mobile devices</p>		✓
<p>Metadata view (catalog record) & Permalinks (for volumes)</p>  <p>The screenshot shows a catalog record for a book titled "Flowers". It includes a small image of the book cover, a "VIEW" button, and search icons. The metadata provided is: Creator: Johns, C. A. (Charles Alexander), 1811-1874; Publisher: London : Society for Promoting Christian Knowledge; Date: 01.01.1911; Total Pages: 793; Collection: Internet Archive, Internet Archive phys., My Bookmarked Volumes. At the bottom, it indicates "560 pages matched".</p>	✓	
<p>PDF download (from individual selected pages and/or from a complete volume incl. fulltext layer)</p>		✓
<p>My Bookshelf & My Bookmarks (incl. bookmark options for pages and volumes) Those powerful tools help to enhance & accelerate the work of each user:</p> <ul style="list-style-type: none"> + Bookmarks allow users to mark specific pages or sections for quick reference. + The Bookshelf feature enables users to organize and store frequently accessed documents. + My Custom Volumes let users create personalized volumes which can be used with the full feature set within NAINUWA® X². 	 <p>The illustration shows a digital bookshelf interface with a hand pointing at a "MY CUSTOM VOLUMES" section. The interface is dark-themed with glowing blue elements.</p>	✓
<p>My Custom Volume (create a customized volume by adding any available page to your new volume)</p>		
<p>Clipping Advanced (clipping of image sections with saving option for each clipping session) NAINUWA® X² offers advanced clipping and PDF functionalities. Those features within a digital archive system allow users to select and extract sections of documents, saving them as PDF files or exporting the clips as image files together with the recognized text. Moreover the PDF feature allows to export the found content - single pages, a selection of bookmarked pages or the entire book - into a PDF with individually selectable quality due to your needs.</p>	 <p>The icon shows a document with a person icon and a PDF icon, with the text "IMAGE CLIPPING & PDF" below it.</p>	✓
<p>Compare – view and analyse multiple documents side by side The "Compare" feature in NAINUWA® X² allows users to view and analyse multiple documents side by side. This functionality helps in identifying differences, similarities and changes between versions or related images, pages and books.</p>	 <p>The screenshot shows two identical images of a vase of sunflowers placed side-by-side in a browser window, demonstrating the compare feature.</p>	✓
<p>OCR-Correction NAINUWA® X² is equipped with an OCR correction feature which optionally enables users to collaboratively improve the accuracy of text recognition. After the OCR process, users can review and correct errors in the text, enhancing the quality of the digital archive. The corrected text can be either uploaded directly by the "community" (if users have the rights for that) or a supervisor can release each corrected text block individually.</p>	 <p>The illustration shows a document with red 'X' marks indicating errors. A hand is shown using a pen to correct the text. The text "OCR CORRECTION" and "CORRECTION" is visible on the document.</p>	✓

FEATURES & ADVANTAGES

Optional Features for NAINUWA® X²

Optional Features for NAINUWA® X ² <i>Optional features can be purchased additionally</i>		
<p>SEARCH BY IMAGES</p> <p>The module "Search by Images" within NAINUWA® X² finds pages or images with similar content on the platform. The embedded Artificial Intelligence ensures to enhance accuracy, recognizing patterns, objects and features for precise results</p>		
<p>Audio & Video viewer</p> <p>This feature enables users to watch, listen and navigate through archived video & audio material directly within the platform. It supports various formats and offers the full compatibility with other NAINUWA® X² features like bookmarking, fullscreen mode, clipping, etc.</p>		optional
<p>AI - POWERED "SPEECH TO TEXT"</p> <p>This AI-powered service enables to transcribe and convert spoken words/language in video or audio files into searchable text. It supports multiple languages and adapts to various accents.</p> <p>This ensures to quickly find and navigate to specific video & audio content by simply using the NAINUWA® X² search.</p>		optional
<p>3D VIEWER</p> <p>The fully integrated 3D Viewer within NAINUWA® X² enables users to interact with and explore three-dimensional models directly within the platform. This feature supports zooming, rotating and examining 3D objects from various angles.</p> <p>It enhances the visualization of art objects, artefacts, architectural plans, engineering models, virtual artworks and other 3D content, providing a more immersive and detailed analysis experience.</p>		optional
<p>Web shop & Payment system</p>		optional

If our packages don't meet your customization visions, we are pleased to discuss your requirements to offer you a complete tailor-made solution!

Nothing is impossible – Nainuwa® X²!