**WHAT IS XNAT?**

In simple terms:

In simple terms, the Washington University XNAT imaging informatics platform is   
**a tool (web application) used by researchers and medical professionals to store, share, and analyze medical images like brain scans or body scans**. It helps researchers collaborate, manage, and process this data securely.   
**It's mainly for scientists, doctors, and institutions involved in medical imaging research and diagnosis.**

This program is mainly for images but can have some text.  
  
XNAT (Extensible Neuroimaging Archive Toolkit) is an **open-source imaging informatics platform** designed to facilitate management and sharing of medical imaging data. Washington University in St. Louis is one of the institutions heavily involved in the development and utilization of XNAT.

Key features and components of the XNAT platform include:

1. **Data Management**: XNAT provides tools for **storing, organizing, and managing various types of medical imaging data**, including MRI (Magnetic Resonance Imaging), CT (Computed Tomography), PET (Positron Emission Tomography), and more.
2. **Data Sharing and Collaboration**: XNAT enables researchers to **share imaging data** securely within a collaborative environment. It allows for controlled access to data, facilitating collaboration among researchers across different institutions.
3. **Data Processing and Analysis**: XNAT **offers capabilities for processing and analyzing imaging data. It supports integration with various analysis tools and pipelines**, allowing researchers to perform tasks such as image preprocessing, segmentation, and statistical analysis.
4. **Customization and Extensibility**: XNAT is highly extensible and customizable, **allowing users to adapt the platform to their specific needs. It provides an API** (Application Programming Interface) for integrating custom modules, plugins, and workflows.
5. **Compliance and Security**: **HIPPA compliant and GDOR compliant.** XNAT includes features to ensure compliance with regulatory requirements such as HIPAA (Health Insurance Portability and Accountability Act) and GDPR (General Data Protection Regulation). It incorporates security measures to protect sensitive medical data.
6. **Integration with Research Workflows**: XNAT **can be integrated into existing research workflows and clinical environments**, providing seamless access to imaging data for research purposes.
7. **Community Support**: XNAT **has a vibrant user community** consisting of researchers, developers, and institutions contributing to its development and sharing best practices.

Overall, Washington University's involvement in the XNAT platform underscores its commitment to advancing neuroimaging research and supporting collaboration among researchers in the field.

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