## Reporting Package

* Reporting Package (RP) primarily deals with the preparation and presentation of AI4H model evaluation results generated by the Evaluation Package (EP) of the AI4H assessment platform.
* Reporting Package provides a unified structure to communicate and report the performance scores, metrics and their measures, properties, features and limitations of the AI4H model evaluation process as well as information related to the allied computational platform performance measures
* Reporting Package provides a customizable reporting interface to support ease of comparison, classification and reproducibility of different AI4H model evaluation results

**Reporting Package- Functional Requirements**

1. **User Interface**

* Graphical Screen/ Display and aesthetics( color, shape , layout, etc)
* User Interaction objects(menus, buttions, icons, etc. )
* Human readable display formats( styles, font sizes,, color backgrounds, etc)
* Different modes of user interaction and rules of user interaction
* Mapping of user tasks to interface actions
* Navigation nodes and links for each interface action
* Report import & export interface
* Internationalization and Accessibilty guidelinescompliance

1. **User Management**

* User Roles
* User Access Privilege / Rights
* Intended User goals and objectives
* Intended User tasks & sub-tasks
* User task sequence and User task hierarchy

1. **Inter-Package Communication**

* Database Schema Validation
* Data Access Interface with Evaluation Package
* Data Query Set defenition for aata retrieval
* URL mapping for API consumption

1. **Report Rendering / Visualization Format**
2. **Report Repository Management**

* Report Version Control
* Report Storage
* Report Retrieval

**Reporting Modalities**

* Basic Report (STATIC MODE): A non-configurable reporting mode is provided for the user to generate a basic reporting format for AI4H model evaluation results
* Custom Report (INTERACTIVE MODE): A configurable reporting mode is provided for the user to configure the reporting parameters and to generate a customized reporting format for the AI4H model evaluation results

**Reporting Parameter Criteria**

* AI Model Factsheet ( consolidated)
* AI Evaluation Process Flow measures
* AI Model Performance Evaluation results (basic measures)
* AI Model Risks and Severity
* AI Model Bias & Fairness measures
* AI Model Explainability measures
* AI Model Generalizability measures
* AI Model Interpretability measures
* AI Model Robustness measures
* AI Model Uncertainty measures
* AI Assessment platform -computational infrastructure measures
* Custom/ Domain specific / Clinical effectiveness -scores & measures
* Intended Use
* Patient Safety
* Device Security & Privacy
* Other

**Report Visualization Modalities**

* Text
* Dashboard
* Tables
* Graphical plots
* Statistical plots
* Comparison charts
* other

**Reporting Package- Design Architecture**

* Reporting package is proposed to be designed as an web application
* A Model-View-Template ( MVT) architecture is proposed for the design of the reporting package.

**Reporting Package- Implementation Architecture**

Technology Stack ( for MVP version)

1. Backend- Django , Database shall be AWS data storage services)

* Web API design -for retrieval of AI4H Model Evaluation results in JSON format

1. Frontend- Django, HTML, CSS ( We may consider Angular instead of Django based frontend)

* Template file design -for presentation of AI4H Model Evaluation results

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