i2b2 Community Projects

New Projects

Title	Description
Accrual to Clinical Trials	The Accrual to Clinical Trials (ACT) project goal is to create a federated network of National Clinical and Translational Science Award (CTSA) Consortium institutions to significantly increase participant accrual to the nation's highest priority clinical trials.
MedCo	Enabling Secure and Privacy-Preserving Exploration of Distributed Clinical and Genomic Data
Multi-fact Table	The multi-fact table project is a new feature introduced in 1.7.09 that enables the i2b2 to query more than one fact table. This new feature empowers the i2b2 to adapt to the needs of such projects as the Patient Centered Outcome Research Institute (PCORI) network and the Observational Medical Outcomes Partnership (OMOP) Common Data Model (CDM). It can also be used for sites that want to be able to query both genomic and phenotype data but don't want the data to reside in a single table.
OMOP	The legacy i2b2 data model is comprised of a central fact table (observation_fact) surrounded by multiple dimension tables (star schema). In the Observation Medical Outcomes Partnership (OMOP) Clinical Data Model (CDM) rather than a central fact table, we have a collection of them distinguished by domain: procedures, condition, drug, measurement, observation, etc. In this project, we modify the CRC to run queries against multiple domain fact tables as dictated by the metadata.
RDF to i2b2 Conversion	
Synthea data in i2b2	Synthea synthetic data can now be loaded into i2b2 for testing. A 63k sample of SyntheticMass patients is available for download.
i2b2 on Genomics Data	This community project extends the current i2b2 query functionality by providing the ability to query for genotyped subjects by specific annotations related to genetic variants. Also, new query widgets have been built in the i2b2 web client that leverages existing i2b2 infrastructure for querying large strings of text stored in the observation_blob field of the observation_fact table.
i2b2-cdi	Concept Derivation Infrastructure: Docker container and simplified spreadsheet-based ETL

Ongoing Projects

Title	Description
C3-PRO FHIR Uploading Cell	C3-PRO Research Framework is an iOS framework written in Swift. Combining FHIR and ResearchKit, usually for data storage into i2b2, this framework allows you to use FHIR Questionnaire resources directly with ResearchKit and will return FHIR QuestionnaireResponse that you can send to your server. In addition, a FHIR Contract resource can be used to carry trial eligibility requirements and define content to be shown during consenting. Subsequently, the contract can be "signed" with a FHIR Patient resource and returned to your server, indicating consent.
CARE - Cohort Analysis & Refinement Expeditors	A collection of webclient plugins to facilitate the analyses & refinement of Patient Set usages.
ExportXLS	The i2b2 Web Client Plugin that tabulates patient data & applicable specified concepts; and facilitates export to spreadsheet.
Federated Query Simulations	Simulations of federated query tools that return aggregate counts, such as SHRINE, by Griffin Weber
Genomic NGS Tool	Next-Generation Sequencing Genomics tools for i2b2. New Sequence Ontology and tools to import NGS data.

IDRT - Integrated Data Repository Toolkit	A novel rest API that allows short restful messages to communicate with i2b2.
Loyalty Cohorts	Because electronic health records are often missing information about patients, we developed and validated a tunable computer algorithm to identify subsets of patients whose data are relatively complete and therefore better suited for clinical research studies.
Normal Patient	This plug-in contains a database script that identifies "healthy normal" patients in an i2b2 CRC cell. This is important for clinical trials that need a healthy control group. It uses a set of ten heuristic filters.
Ontology Tools	Tools to extract and organize ontologies. The tools are organized by Lori Phillips. Recent additions is a library of ontologies which can be downloaded using the i2b2 workbench.
SCIHLS Disease Data Mart Request	Automated Creation of a new data mart with the SCILHS ontology for projects that are initiated by a SCILHS SHRINE query.
SCILHS PCORnet Common Data Model Ontology	SCILHS (with much help from others) has developed an i2b2 information model that represents the PCORnet Common Data Model (CDM). This information model consists of an i2b2 ontology/terminology and a process for mapping local data elements to the ontology without changing the underlying imported data. This approach highlights i2b2's ability to separate data model from both information model and the underlying data format.
SHRINE	The Shared Health Research Information Network, organized by Doug MacFadden
Workplace Items Sharing Enhancement	A collection of webclient plugins that Enhance the Sharing of Items within the Workplace pane
i2b2 FHIR Cell	Built by Kavishwar Wagholikar, this i2b2 addition allows SMART cells to communicate with the i2b2 core using the Fast Healthcare Interoperability Resources.
i2b2 Web Client	The i2b2 Web Client is one of several core projects that are directly sponsored by the i2b2 team.
i2b2 Workbench	The i2b2 Workbench is one of two i2b2 clients available to the i2b2 community. It is a collection of client-side components that communicate with i2b2 cells and help aggregate their functionality in the the i2b2 Hive. Each workbench component is designed as an Eclipse-based plug-in that interacts with a hive cell; collectively these plugins provide a cohesive entity to tie all the i2b2 cells together.
mi2b2	Medical Imaging Informatics Bench to Bedside, organized by Christopher Herrick

Past Projects

Title	Description
CRC Tester	A Workbench plug-in that tests the CRC web services by Mike Mendis
Clinical Trender	The Clinical Trender aims to allow researchers to track and visualize certain clinical variables related to a selected patient cohort in order to understand the longitudinal changes of the cohort and potentially identify early signs of significant deviates in these variables. This function is inspired by the work of Brownstein, Sordo, Kohane, and Mandl, which demonstrated the potential of elucidating important temporal trends using healthcare databases.
Control Matching	A server side plugin to find a set of matched controls based upon a patient set.
Crimson	A project to make specimens available through i2b2 infrastructure, organized by Lynn Bry
FACE caGrid CQL2 Data Source	A caGrid/TRIAD data service that runs i2b2 queries via the RESTful interface to CRC
Familial, Associational, & Incidental Relationships (FAIR) Initiative.	A collection of DBA tools and webclient plugins to facilitate the identification of related concepts amongst related patients.
GIRI (Generic integration of R into i2b2)	A project to make arbitrary R functions available within the i2b2 Web Client.

HOMERUN	The Hospital Medicine Reengineering Network, organized by Nick Anderson
Health Ontology Mapper	A general purpose instance mapper and associated ETL processing function running as an i2b2 cell, organized by Rob Wynden at UCSF.
Incorporating Number Of Studies Query capability in i2b2	Implements an administrative interface that reports Buber of studies done in an i2b2 hive.
NLP cTAKES Project	A project which integrates cTAKES and i2b2 to extract concepts via NLP from clinical narrative into the i2b2 observation fact's format.
ODM to i2b2 importer	i2b2 cell to import electronic data capture (EDC) data such as data from REDCap and import into i2b2.
PopMedNet Tools	Using PopMedNet and i2b2 for Distributed Queries
Query Health	Integrating i2b2 and Query Health for standards-compliant population health management
REDCap Tools	Research Electronic Data Capture Organized by Mark Weiner
SETL - Standards-based Extract, Transform, and Load	Interoperability with standards-based clinical data formats, including HL7 Continuity of Care Documents
SMART	Substitutable Medical Apps, reusable technologies i2b2 integration, organized by Nich Wattanasin
SNP Terminology development with VISTA	Creating Single Nucleotide Polymorphism terminologies that will survive versioning, organized by Lori Phillips
TimeAlign	TimeAlign displays the records and their events in a linear, zoomable timeline that allows investigators to quickly grasp the temporal relationships of important events.
i2b2 wizard	Useful tool for installing i2b2 from scratch organized by Sebastian Mate
i2b2-based Registries	An enhanced patient registry and an associated web based toolkit, organized by Keith Marsolo