The UNIMAS Integrated Research Information System or iRIS is now version 7.

The seventh iteration of the research gateway has undergone a reengineering process, where the previous version was totally overhauled. By incorporating the state-of-the-art web technologies, iRIS can now provide users’ access to its system via any mobile devices. In addition to this, iRIS now refers to the UNIMAS Portal for its authentication process. This allows users’ access to iRIS using their existing UNIMAS portal login details.
Single Page Application

At the front-end, iRIS is a Single Page Application developed using HTML5, AngularJS and Bootstrap. By leveraging on AngularJS router for URL management, all requests are handled asynchronously without the need for server-side rendering. This has contributed to the significant improvement of the front-end performance and above all, a better user experience.

RESTful Web Service

The back-end on the other hand, adapts the Representational State Transfer (REST) architectural style via the use of Java, Spring MVC framework and Java Persistent API. This provides the ease of integrating with any 3rd party applications. The integration across systems occur at the application level through the HTTP request without the need to access the databases. This is another feature that projects iRIS ahead in terms of web application architecture design in UNIMAS.

Responsive Web Design Approach

Developed using the Responsive Web Design approach via Bootstrap, the user interface is available in four (4) modes (depending on the screen size, and user setting);

i. Mobile Mode: optimised for small screen device;

ii. Normal Mode: optimised for normal desktop/laptop/tablet;

iii. Presentation Mode: optimised for the projection (view during presentation with projector)

iv. Hi-Contrast Mode: this can be enabled for visually challenged users.

In addition, iRIS also provides users with a finger-friendly user interface.
Databases Interoperability

iRIS uses an Oracle Database. Owing to the abstraction in database query (JPQL) and the persistence through Object Relational Mapping (ORM), the system is expected to work with other major relational database management systems.

Grant Application (2014)

For all of the internal grant application process including:

- Grant application planning
- Department endorsement process
- Expert Panel Review process
- JKPI approval process

In IRIS7, the information will only be input once. As the information goes through multiple review process (department level, Expert Panel, JKPI), the data collected will be more accurate.

Research Monitoring (2015)

For grant monitoring:

- Project (activities & milestones) management
- HCD (Human Capital Development) info management
- Output/Publication management
- Research progress update
- Progress Report Submission

As the research progresses, the researcher will be able to update their information periodically into the system. At this stage, IRIS7 is expected to be their project monitoring tools. These information will be used for research progress report submission, with just a click away.