

UniBus Cloud Platform

Technical Characteristics of the Platform

Cloud-based collaboration platform – UniBus Platform is a cloud-based collaboration platform which can be accessed by anyone with access to laptop and internet. It allows organisations to access, edit and share ideas anytime, from anywhere, they're able to do more together, and do it better. Cloud-based workflow and idea sharing services help them make updates in real time and gives them full visibility of their collaborations.

Built on powerful MVC architecture – UniBus Platform has been build using Model–view–controller (MVC) architecture for developing user interfaces that divides the related program logic into three interconnected elements. This is done to separate internal representations of information from the ways information is presented to and accepted from the user.

Responsive web design – The UniBus platform offer responsive web design that makes web pages render well on a variety of devices and window or screen sizes such as laptop, tablet and phone.

User Specific Dashboard – UniBus Platform provide customised platform for each user role. UniBus has specific dashboard for company users, HEI representatives and students. It took extra time than what was planned in the proposal preparation stage to implement a set of user dashboards.

Inception Services – The platform provides intelligent service to support companies to create innovation challenges; HEIs to select appropriate innovation challenges and add them to their challenge pool; students/academics/researchers to submit their ideas.

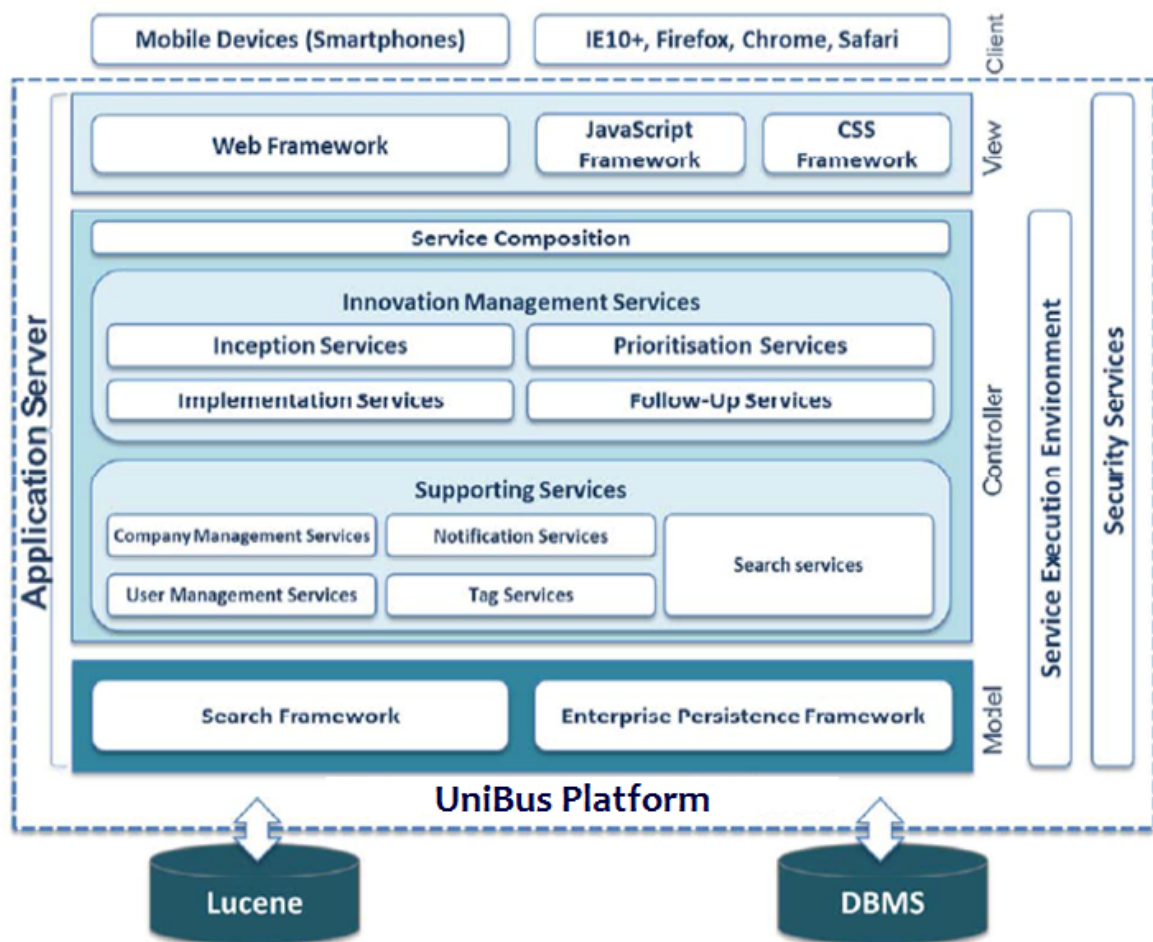
Grading Framework – UniBus platform has developed a grading framework that provides guidelines on how will the HEI assess and give credit for students' work carried out on the platform and how will companies assess the ideas/solutions proposed by students. It also provides guidelines on how will companies assess what a good idea/solution is and communicate this to the HEIs/students.

Intelligent Scope Services – UniBus Intelligent Scope services enable companies to open their challenges to specific institutions, countries or for all the users on the platform. However, it was not easy task to provide such flexibilities. Extra resources were allocated to provide such a complex service.

Security Services – C4FF team implemented security services to protect the UniBus Platform from online attacks such as SQL Injection, Malware attack, Session hacking etc. UniBus Platform keep record of users' personnel information. Therefore, it was critical to make the platform secured from outside attacks. These security services will keep the UniBus platform protected from hackers and cyber-thieves from accessing sensitive information.

Project Management Service – UniBus platform provide collaboration project management services for companies and academia. This service allows users to create project, tasks, assign them to team members and so on.

Overview of UniBus Design & Development Architecture



UniBus Platform Architecture

Function	Software Tool
Programming Language	C#
Application Server	IIS
IDE	Visual Studio 2017
CSS framework	Twitter bootstrap
JavaScript Framework	jQuery + Mobile

Web Application Framework	ASP.NET MVC
Version/Source Control Software	TortoiseSVN

ASP.NET Core MVC is a rich framework for building web apps and APIs using the Model-View-Controller design pattern. The Model-View-Controller (MVC) architectural pattern separates an application into three main groups of components: Models, Views, and Controllers. This pattern helps to achieve separation of concerns. Using this pattern, user requests are routed to a Controller which is responsible for working with the Model to perform user actions and/or retrieve results of queries. The Controller chooses the View to display to the user, and provides it with any Model data it requires.

User accounts for TRNA

Manager@unibus.com

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Teacher@unibus.com

Teacher@unibus1

Student@unibus.com

Student@unibus1