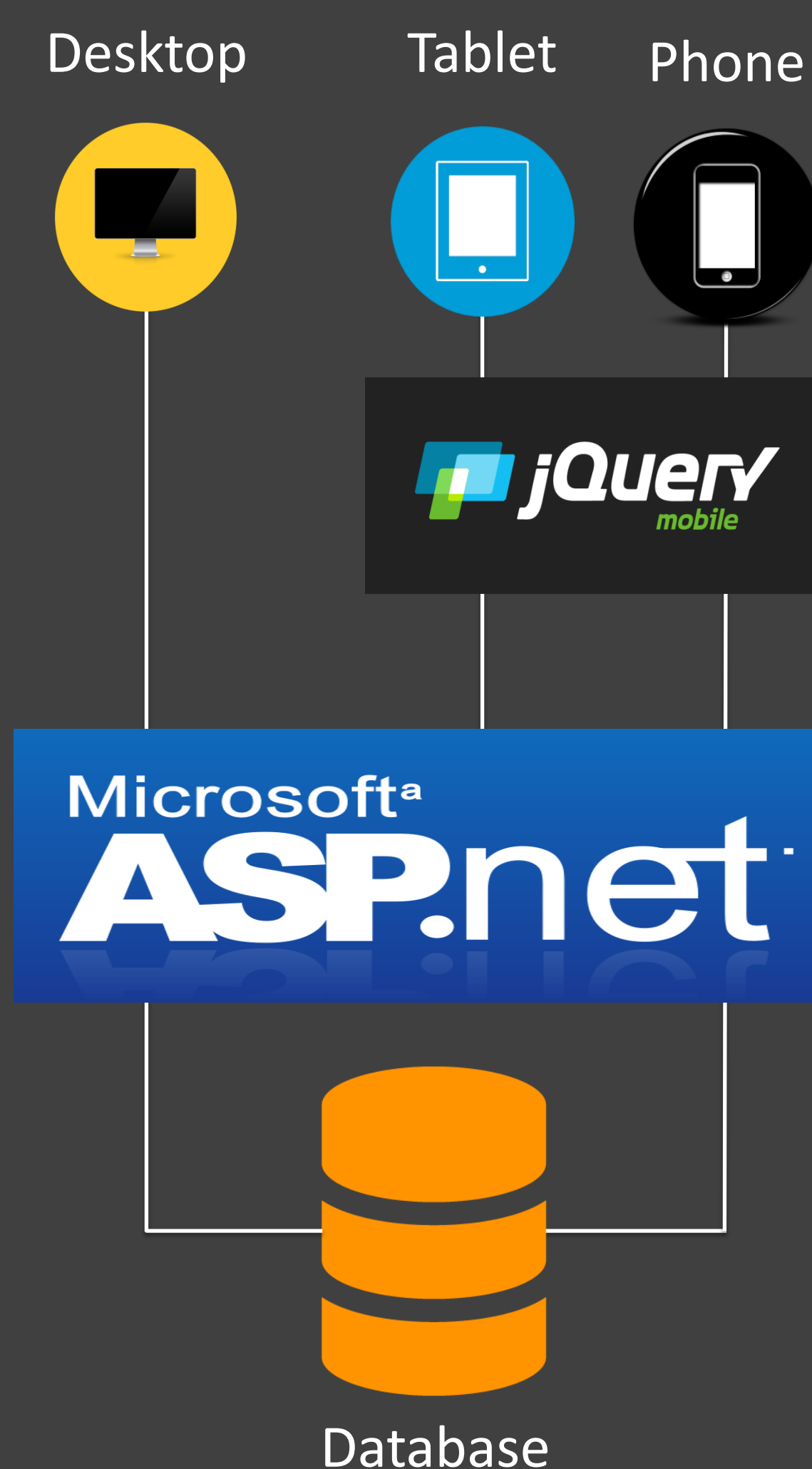


Introduction

The Deactivation & Decommissioning Knowledge Management Information Tool (D&D KM-IT) is the repository of useful information built specifically for the D&D community. The knowledge provided by the D&D KM-IT is the experience and expertise gained by people within the field and fellow employees of the Department of Energy (DOE). This information has been the result of gathering, analyzing, storing, and sharing knowledge to help reduce time spent on discovering previously found data. In order to help in organizing all the data from all the professional contributors, the D&D KM-IT has been divided into 12 different modules. Each individual module pertains to a different area of information for users, such as vendor and technology information, collaboration tools, and even a hotline that contains problems posted by the users.

Purpose

- Design and develop the module for the Best Practices on D&D KM-IT mobile platform deployed at <https://m.dndkm.org>
- The Best Practices mobile module should integrate with existing modules seamlessly
- Use the D&D KM-IT existing database to consume information for the mobile system



Method

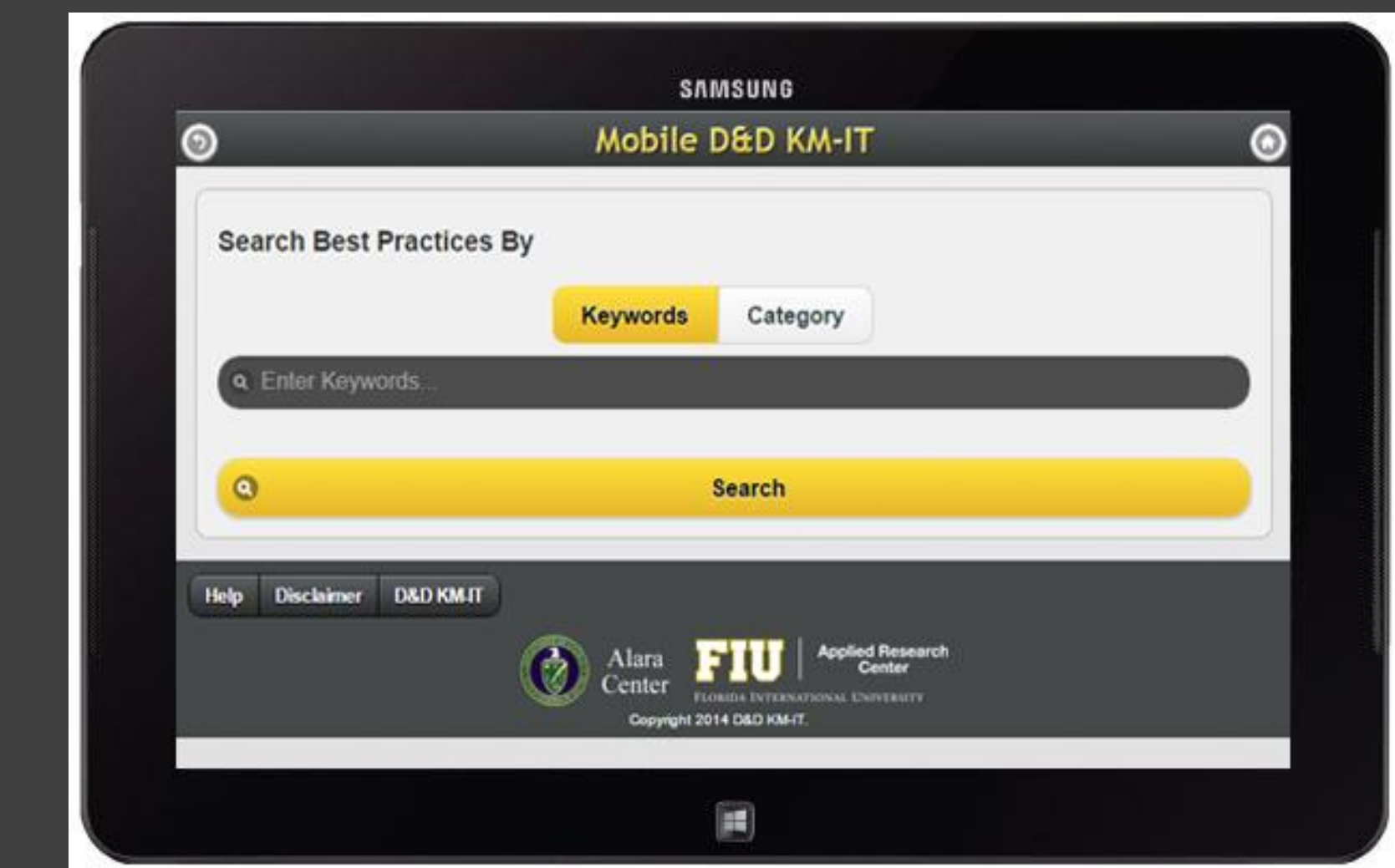
- jQuery Mobile framework was used to develop Best Practices module for mobile devices.
- jQuery Mobile framework provides support for responsive web design (RWD).
- RWD allows adaptation of the layout and user interface of websites and web apps to different device resolutions, screen densities, and views.
- UI design was implemented with three fundamental elements:
 - CSS media queries
 - An adaptable grid
 - Flexible images and media



Advantages/Benefits

- A responsive web design adapts to any-sized screen/resolution and orientation view.
- ASP.NET compatible which allows the D&D KM-IT database to support all platforms accessing the system.
- Navigating pages is more bandwidth efficient by refreshing data in small section with Ajax instead of reloading the entire page
- Multiple parts of a page can perform different tasks resulting in improved user's experience

Results



- Mobile system is accessible on compatible devices running Android, Apple, Blackberry, Palm, and Windows devices
- Best Practices searches through Characterization, Decontamination, Dismantlement, Material Disposition, and Worker Safety
- Keyword search is enabled for the best practices that are available on both the desktop and mobile systems
- Documents are formatted into a PDF file format to ensure compatibility on any device

Conclusion

- Fully integrated with the desktop Best Practices module and displays documents that are uploaded on web platform
- Fast-loading with D&D KM-IT mobile system and downloadable documents
- Responsive design which gives the same user experience when either viewed on smart phone or tablet

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Scan here to go to the mobile website