



FIU Knight Foundation School of Computing and Information Sciences

Fall 2023 Senior Design Project

NextAD: Profile Management Integration App

Ismail Abousalem

Instructor/Faculty: Dr. Masoud Sadjadi, Florida International University

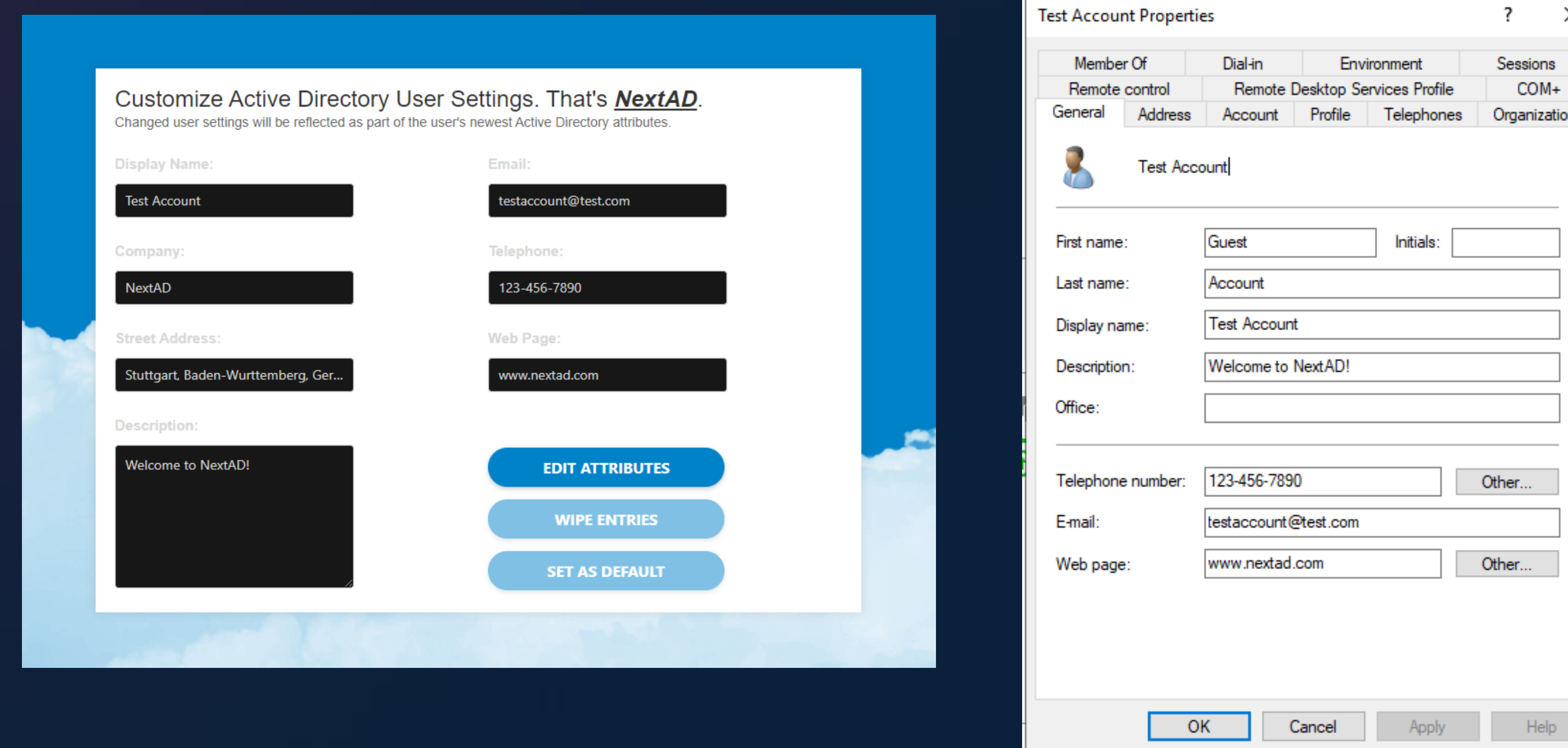


CURRENT SYSTEM

The current version of NextAD allows users to:

- Modify Active Directory attributes at the press of a button
- Request to preview user attributes from the Active Directory
- Wipe all attributes before confirming to Active Directory
- Be recognized automatically on the Active Directory through their User ID (UID) when logged onto their account.

SCREENSHOTS



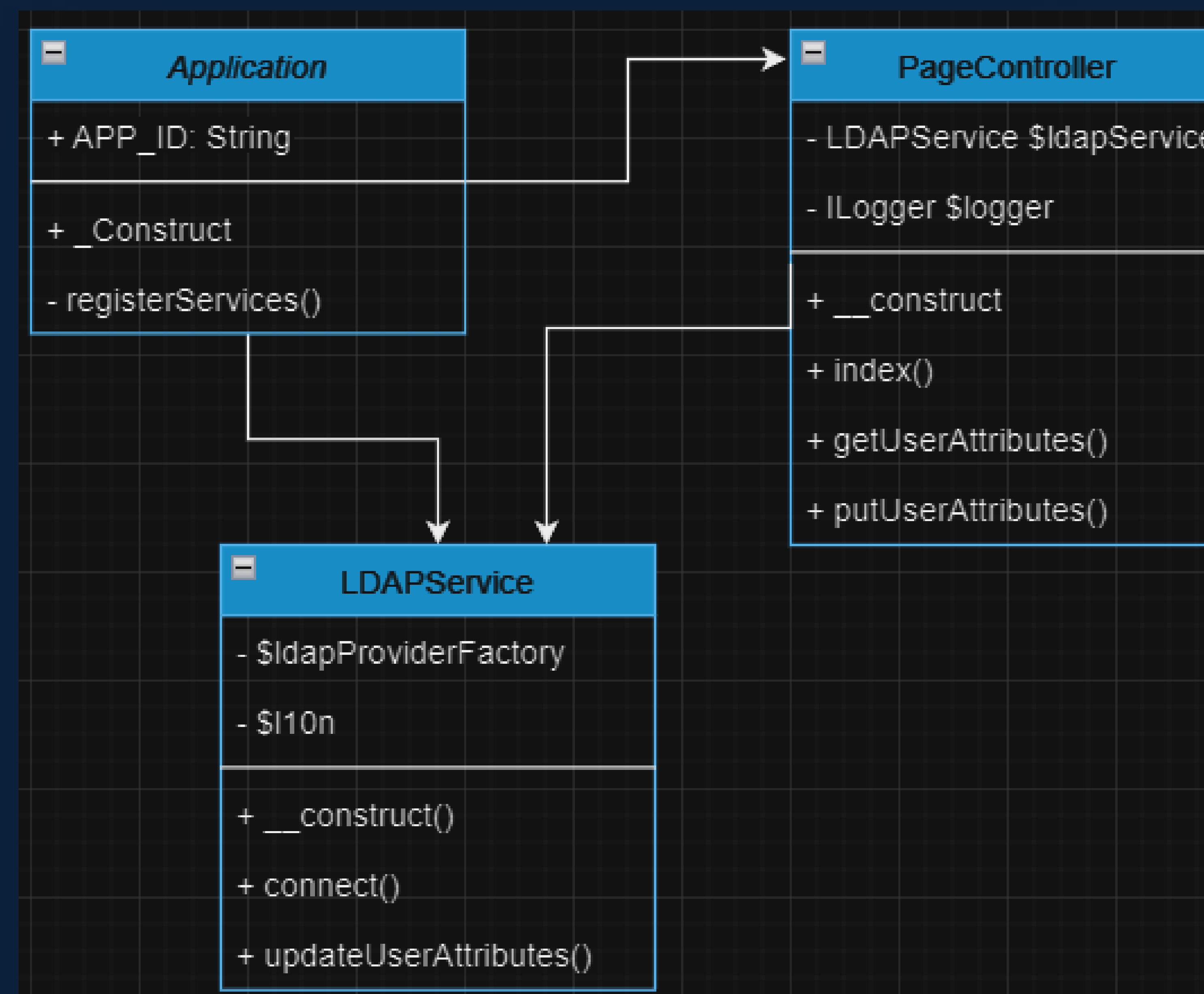
REQUIREMENTS

- Nextcloud LDAP application (adjust settings within LDAP Integration Expert Settings UUIDs to 'CN')
- A recognized Active Directory system (such as Azure AD, Windows AD, etc.)

VERIFICATION

Verification of users in Active Directory was successfully completed using the LDAP administration settings in Nextcloud. By configuring the LDAP settings with the client and base DN, a connection was established with the Active Directory server, enabling the execution of LDAP queries for user recognition in Nextcloud. This functionality permits users to log in using their Active Directory credentials within Nextcloud and access the NextAD app. It is crucial for Nextcloud to identify the Active Directory client, as NextAD retrieves their user ID upon initiating the app.

OBJECT DESIGN



IMPLEMENTATION



INDIVIDUAL CONTRIBUTION

I contributed to developing Nextcloud API endpoints for updating user attributes in Active Directory and creating corresponding on-screen buttons for user interaction. My involvement spanned both backend functionality and frontend interface, aiming to streamline the process of managing user attributes seamlessly through Nextcloud.

SUMMARY

The aim of designing this Nextcloud application was to establish a seamless link that allows users or administrators to conveniently modify their own or others' attributes within an Active Directory from any location, provided they are using Nextcloud.

ACKNOWLEDGEMENT

The material presented in this poster is based upon the work supported by XXXXX (name of the project sponsor: federal, state or local government, or corporate partners, where applicable). We/I thank XXXX for his/her/their assistance and mentorship that I/we received throughout the senior design project.

