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CSC 4610 Project Report

Peerra: Online peer support

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# Introduction

[Peerra.com](peerra.com) was designed as an online tool for connecting peers who have questions about a topic to those who have experience with it. The service works by requiring all users to advertise a subset of their knowledge as public “skills”. Anyone can use Peerra to search for users with certain skills, but only registered users can request to connect other users. When creating a connection request, the requestor can include a message to indicate why they want to connect. The target user can view the connection request message and decide to accept or decline the connection. Contact information for users is only provided after a connection is accepted.

The application runs on three servers in Microsoft Azure. All data is stored in a Microsoft SQL Server database. The database is manipulated by a RESTful ASP.NET Core web API. The web API is secured with HTTPS and bearer token authentication. The front-end server complies HTML layouts server-side and sends them to users. From there, client-side JavaScript XML-HTTP requests are used to fetch data from the web API to populate the web interface with relevant data.

# Related Works

While Peerra was not inspired by related services, it does provide similar functions to other social media. The most notable similar service is LinkedIn. Like Peerra, LinkedIn is also focused on making connections between users and gives you the opportunity to advertise skills. The main difference between Peerra and LinkedIn is in how and why connections are formed. While LinkedIn focuses on connecting those who have likely met in person, Peerra aims to connect users that otherwise haven’t met based on the advice that they could share. Another goal of Peerra is to localize connections to those who might work or study at your institution. In this way, connections in Peerra can evolve into deeper relationships than the more ephemeral type found in most LinkedIn connections.

# System Architecture