Programming Skills Lab 3

T9 Server Part B- Design Documentation

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I have used Ganesh Chandrasekaran's T9 server to build my client against. I have attached his server's executable along with this submission. I used this server after trying out a couple of other servers that were a bit slow (or had issues) and constituted only one method to load the dictionary and retrieve valid words. This server worked well since there was separation between the 2 functions and had the cross domain XML policy implemented perfectly, from what I could figure.

The client consists of the following components:

1) MainPage.xaml : Provides a user interface for the Silverlight application and acts as a View

2) MainPage.xaml.cs: Acts as a controller. Communicates with the model class and passes information to it. Handles how words are displayed on the view. Also brings about non-predictive texting.

3) Model.cs: The model class that interacts with the server and calls its methods asynchronously. It sends information to the controller and view.

There is clear separation between the client and server. The list of valid words is never stored permanently on the client side. Non predictive texting works regardless of a connection to the server. Predictive mode is handled by the server. Only the model interacts with the server, not the view and the controller.

The server I chose had initial issues handling cases that return hyphens, but Ganesh was prompt enough to fix this minor problem. Apart from this, the server worked perfectly fine. The server has 2 methods - one to initialize the dictionary and the other to return a list of valid words or prefix words or hyphens. The server is state-less and handles operations asynchronously. There is no wait time to perform any of the aforementioned operations. All valid words are retrieved correctly.

Issues: No issues faced with the server.

PS: I did have issues with my client, and I had sent you a frantic email about those. Thankfully, I was able to resolve all of those problems. Thank you for the extension on this lab!