**FromFrom: The Plan to Connect the Middle East**

A Technical Report submitted to the Department of Computer Science

Presented to the Faculty of the School of Engineering and Applied Science
University of Virginia • Charlottesville, Virginia

In Partial Fulfillment of the Requirements for the Degree
Bachelor of Science, School of Engineering

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Fall, 2022
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# FromFrom: The Plan to Connect the Middle East

**Abstract**
Digital Capital Solutions, a startup company, hired another intern and me to develop an application to connect people based on where they are from, called "FromFrom". The goal of "FromFrom" was to help people connect with others of similar background or maybe diversify their friends. To achieve this goal, the company decided to build a social media style application with areas allowing users to post their country of origin, and where they currently live.

To design and implement this application, the design team needed a knowledge of the whole engineering process. We also had to detail all the requirements, decide how we wanted to design the user interfaces, and keep clear contact with the client to make sure we were not straying away from his desired outcome. More specifically, we needed a working knowledge of front-end development to build the user interfaces, and we had to learn how to use a database for storing user information and interactions. One of the major outcomes of this project was deploying it on both the Google Play Store and Apple's App Store. Future work includes some interface fine-tuning and fully deploying it for consumers to use.

## 1. Introduction

Social Media can be a beneficial tool for connecting. Social media can also have a positive effect on the mental health of adolescents; during times of isolation, it can be a way for people to connect and keep in touch with their friends and family. It can be a way for people with different conditions to find people who relate to them, and a way for people from different cultures, religions, and ethnicities to meet people who empathize with them. There has been research showing that social media is used as a place to receive support as well as to be a space of sharing and expressing thoughts, where users can make new friends and thus distance themselves from loneliness (Keles et al., 2020).

The task is that the company with which I interned, Digital Capital Solutions, was under contract to provide an application to help connect people in the Middle East. Though they do have access to other social media, "FromFrom" is an application meant to help people connect based on people's countries of origin; it's common for people to form social groups based on nationalities, as many institutions have groups for people from any respective country.

## 2. Related Works

FromFrom is the first of its kind in being a social media that connects people based on where they're from, but there are other projects and platforms that also connect people. Sajithra, K., & Patil, R. (2013). Social media–history and components. *Journal of Business and Management*, *7*(1), 69-74.

The above article addresses the history of social media; though it's debatable whether email counts as social media, email has a strong impact on setting the foundations of social media as it was used as a space for communication and collaboration. It then moved on to other platforms of discussion, such as "Usenet" and "IRC" that were used for chatting up until 1991, where personal websites started to become popular. People loved being able to share their opinions online and did so frequently, and in 1998 to 2004, blogs, podcasts, and wikis became very popular. Blogs were not much different

in terms of communication, but software improvements allowed for blogs to be more easily done for larger audiences. In 2005 to now, "web2.0" applications became popular, which focused on user-generated content; this is our modern-day social media.

## 3. Project Design

We, Digital Capital Solutions, designed FromFrom to be a social media application with its theme of having users share their country of origin. Thus, it contains many elements that a social media application would have.

### 3.1. Major Components

FromFrom contained many major components like other social media applications. These features included a respective user profile page, a newsfeed, messaging interface, account creation page, and more. The theme of FromFrom was in user accounts and account creations pages – the former showed where the user was from, as well as where they were "from from," or their country of origin. The latter required users to enter which country they were from and where they were "from from" to create an account, as that is the whole point of the application.

The other major components functioned as one may assume. The user newsfeed showed posts from accounts they were following. Posts could range from texts to photos. Users can comment on a post by typing into the respective textbox under it, or "like" it by clicking the "thumbs up" button. For the newsfeed, users could message anyone they liked by typing their name into a user search bar, or by clicking on an existing conversation. This would open the messaging interface, which looked like a standard chatting interface.

The user account page contained the number of their posts, as well as their followers and following, both of which when clicked would display a list of respective users. The user account page also displayed a grid list of all posts by a user. FromFrom also had a navigation menu where a user could select on their respective account page, their existing messages conversations page, their newsfeed, their application settings, their individual posts, and a logout option, which would sign a user out of the account.

### 3.2. Challenges

Developing a social media application was much different than any type of software development I had done in my coursework. The language, JavaScript, as well as the framework used, React.JS, were topics I had no exposure to in any courses I had taken. Also, the goals were different. While coursework usually had an answer key, the solution to building FromFrom was ambiguous. It could be done in any way, and it was possible that no "solution" would be available until a "better" software engineer than one present in Digital Capital Solutions looked at the codebase.

To handle the challenge of learning React.JS, the main framework used for the project, I did project-based learning. I started doing mini projects using the framework to understand the fundamentals, some of which were a to-do list, weather app, and restaurant finder app. These projects strengthened my ability to teach myself, as well as my overall understanding of how to build applications in React. Having a base understanding of React by itself, however, still has a large gap before designing an entire social media application.

Another major challenge after understanding basic React was learning how to solve the problems, such as building the different user

interfaces. To combat this, a leverage of using the internet to find causes and solutions to handling software errors, as well as how to implement different functions and tools became increasingly useful. A common problem-solving approach I took was to brainstorm all the intuitive ways I would solve a problem, and then use the internet to see how realistic and problematic my solution could be. After doing this, I would try to implement the solution or think of a different way, and then use the internet once again to find functions and methods to carry out the overall solution. Once this was done, I would do testing with my co-intern to check for various cases, and then finally submit my code for review.

## 4. Results

Digital Capital Solutions spent about four years creating FromFrom, and with the conclusion of my internship, I initiated the process of uploading it to the App Store.

My co-intern and I tested every major feature of FromFrom to ensure that they worked with various inputs and interactions, that there were no common bugs, and that the app would not crash. The application has some minor intuitive display errors in the messaging interface, but there is nothing major such that the app should be withheld from being uploaded.

From my personal standpoint, I gained more knowledge and experience in the realm of building a project that was invested in and would return money to a company, as well as a project that had no set answer key or solution. It was up to ~~the~~ Digital Capital Solutions to build the application according to the investor's vision. I gained more experience in teaching myself and working with a team, along with learning how to communicate more clearly and effectively. I also gained experience using tools such as Git, GitHub, Google Firebase, and the React.JS framework.

From Digital Capital Solution's standpoint, FromFrom has some features they plan to work on and release, but the overall application is currently being uploaded onto the Apple App Store and Google Play Store. We expect users to enjoy the app, make new friends and relationships, and network with people from similar and diverse backgrounds.

## 5. Conclusion

FromFrom has massive potential to connect friends and family, as well as provide a new way to make relationships. People often want to make friends of similar background or have friends from diverse backgrounds, and FromFrom targets just that. Social media has a long history of providing companionship and fostering community, but no applications have ever had the same goal as FromFrom.

## 6. Future Work

FromFrom still needs to be fully deployed onto the Google Play Store and App Store. Though the major work is done, there are a few bug fixes and extra features that need to be added. Some of these features include a more readable notification counter as well as the ability to block users.

## References

Keles, B., McCrae, N., & Grealish, A. (2020). A systematic review: the influence of social media on depression, anxiety and psychological distress in adolescents. International Journal of Adolescence and Youth, 25(1), 79-93.

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