BloodLine

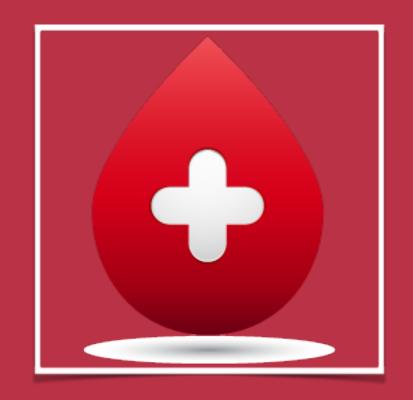**Sruthi Pillai, supervised by Dr Luis Vaquero Gonzalez**
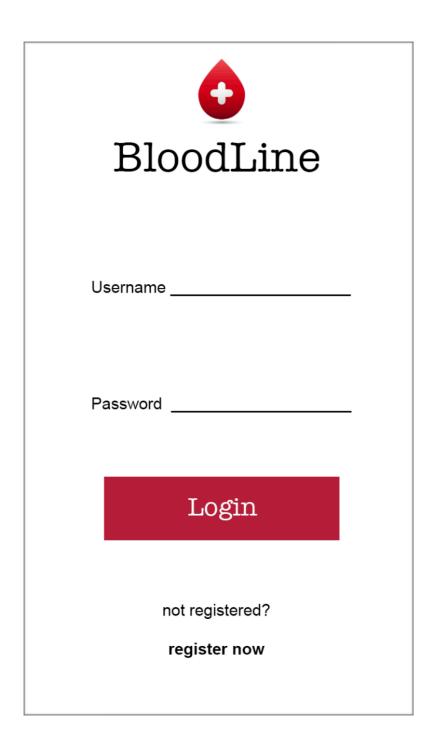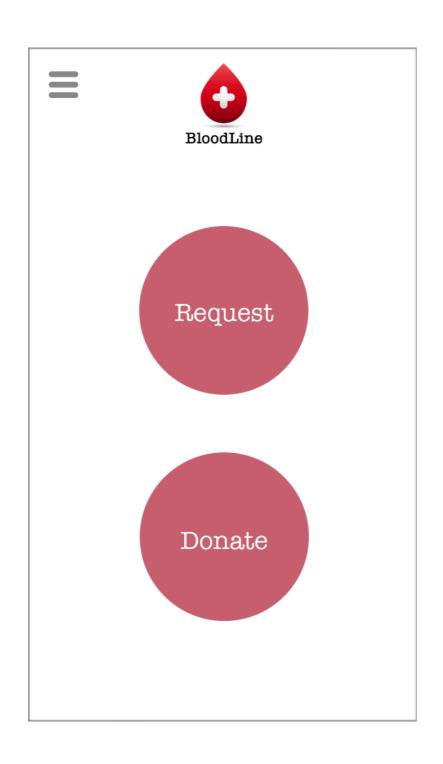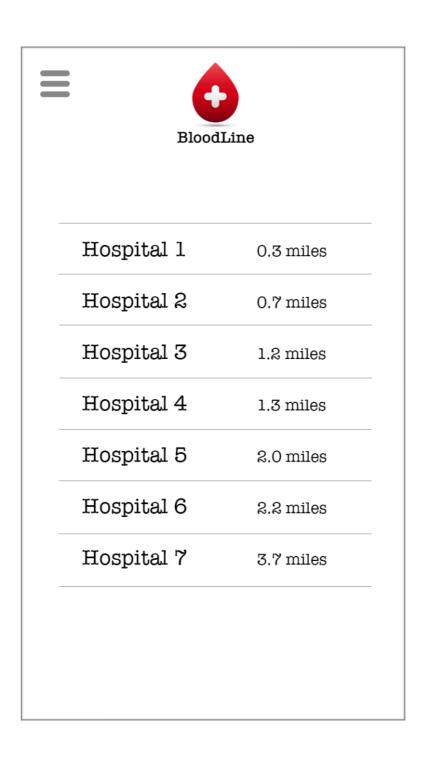**University of Bristol, Department of Computer Science**

OVERVIEW

An application to facilitate blood donation for emergency situations and looking at mobile application performances for low-bandwidth networks.
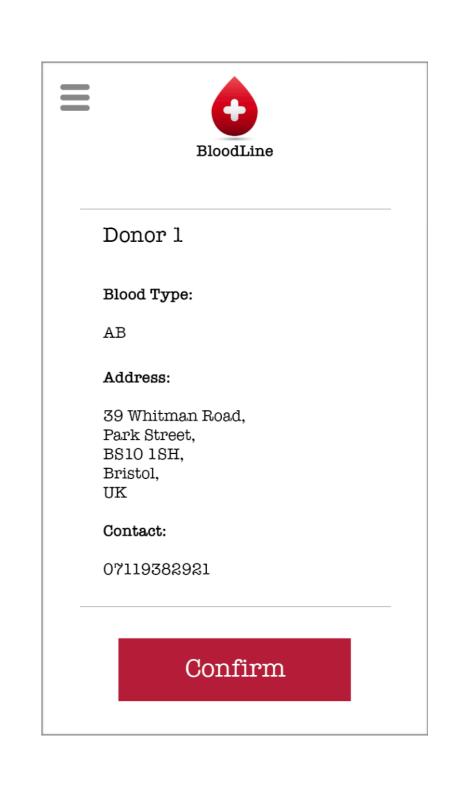
INTRODUCTION

- ✦ The aim of the project is to create an online platform for blood donation.

- ✦ Blood donation in the UK is currently carried out via NHSBT where blood is collected, processed and then supplied to hospitals.

- ✦ However, in under developed countries and areas where blood related emergencies are significantly higher in number, the need for emergency blood donation is greater.

- ✦ In such scenarios, having an application which connects blood donors and requesters, facilitates emergency blood donations and helps to reduce fatalities caused by the lack of blood.

- ✦ Since the application is being primarily developed for under developed countries, the major challenge is to investigate how the application can work well with low-bandwidth networks.

BloodLine

Username _____

Password _____

Login

not registered?
register now

BloodLine

Request

Donate

BloodLine

Hospital 1	0.3 miles
Hospital 2	0.7 miles
Hospital 3	1.2 miles
Hospital 4	1.3 miles
Hospital 5	2.0 miles
Hospital 6	2.2 miles
Hospital 7	3.7 miles

BloodLine

Donor 1

Blood Type:

AB

Address:

39 Whitman Road,
Park Street,
BS10 1SH,
Bristol,
UK

Contact:

07119382921

Confirm

PROPOSED SOLUTION

- ✦ The application is being developed for Android OS

- ✦ According to www.statista.com, Android holds a share of 82% of the market in countries like India.

- ✦ Build a very light application with a clean and simple interface.

- ✦ Requesters would use the application to find suitable blood donors within a certain location

- ✦ All nearest suitable donors would receive a notification and once a match is made, a hospital nearby would be located

FURTHER WORK

- ✦ Investigate how the application can be developed to work well with low-bandwidth networks

- ✦ Since the application is being developed in the UK, the low-bandwidth would have to be simulated

- ✦ Look at how peer-to-peer networks can be utilised to prevent the application from being disconnected due to low-bandwidth.

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