

Demo: Using Mobile Devices to Personalize Pervasive Displays

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1. INTRODUCTION

Personalising content on public displays can be achieved through many methods; recent work has often used the Bluetooth capabilities of mobile devices [4, 1]. However, power and privacy concerns may lead users to switch off the Bluetooth on their mobile devices, making them less useful for display personalisation. In this demonstration we show applications built using Tacita, an alternative method for allowing mobile users to make display personalisation requests.

2. DEMONSTRATION OVERVIEW

We previously demonstrated Tacita at HotMobile 2012 [3]. The system is comprised of four components: 1) an Android application that allows viewers to define content preferences; 2) a display component that schedules and renders content onto a display; 3) a set of Web applications designed for rendering on public displays; and 4) a map provider, which provides a database of display locations and available applications.

When the mobile application (Figure 1) determines that a user is near a public display that can provide applications matching their preferences it sends a personalisation request to the corresponding application. Each request specifies the display upon which to show the content plus any personalisation parameters. The application then sends a visualisation request to the display to ensure that the generated content is shown on the display.

This demonstration builds on previous work by expanding the set of public display applications and integrating with a novel display component, Yarely [2]. Yarely is Python-based display node software (handling media playback, sensing, and scheduling) designed specifically with the goal of

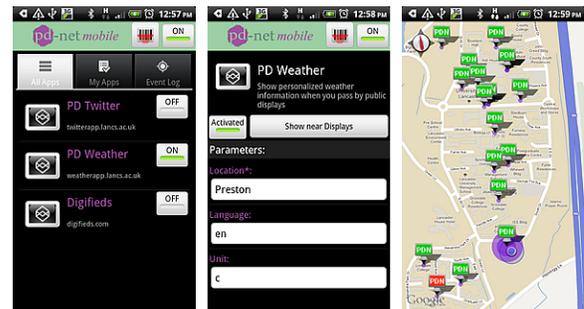


Figure 1: Tacita Mobile App UI

supporting open display networks. The player is intended to support novel display applications that are dynamically scheduled, making it an ideal choice for Tacita.

3. REQUIREMENTS

The demonstration requires mains power, wireless Internet connectivity, wall space for projection, and table space to support a small projector and computer.

4. ACKNOWLEDGMENTS

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5. REFERENCES

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