

Android Applications Based On Conference Navigator

Independent Study Report
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Introduction

Conference Navigator website is a personal conference-scheduling tool with social linking and many significant features like recommendation. It makes great contribution on providing available interesting conference program and the proceedings, as well as arranging the reference papers into the right schedule. What's more, the author list and their information can also be reached in CN. One of the wonderful functions is that people who have signed in can add a session they like easily into their own schedule and manage them conveniently. In this way, CN users can control access to their information and take fully advantages of it. Conference Navigator's main aim is to enhance users experience at conferences.

Since the Android application based on Conference Navigator is mainly designed for the specific users preparing to attend very one of the conferences, while the web version Conference Navigator contains quantities of interesting conferences and the relative information, the Android device version, on the contrary, concentrates on one conference.

Considering about functions, it contains schedule, presented papers, posters, workshops, tutorials, keynotes and also sign in, which covers most functions in CN website.

Goals

Since continuous interesting conferences all over the world convene through out in the whole year, my primary task is to generate CN Android Application for each of the particular significant technology summits. So each conference has its own application. As the Conference Navigator Android application is based on the original one, the first step for me is to understand the project by studying its classes, methods and structures. After getting familiar with it, when the new conference data has been downloaded, I wipe out the previous data in file and insert new data instead. And all the relevant information should also be updated to adapt the coming conference, such as background picture, logo, application name, version and so on.

Besides the data changing, I was responsible to correct some bugs and complete some functions. In the project, there are a few functions not finished yet, for example, the paper links are unable to display, users cannot sign in again after signing out once, and author images need to be demonstrated.

What's more, there is still work to do in the future to solve existing problem, enhance functions and fulfill the CN Android application.

Technical Details

Development Environment and Techniques

1. Android 4.2.2
2. MySQL
3. Google APIs: 17
4. Eclipse with JDK

Emulation environment

For initial simulation: Android Virtual Device (AVD) by Android SDK
For real emulation: ASUS Google Tablet NEXUS 7

Technical Detail

The whole debugging environment is Eclipse and for the database tool, I choose Navicat Premium. Data is all added and updated in database first using MySQL, which is controlled by Navicat Premium. As the data source is stored in file initially (while can also be reloaded after the application has been installed), the data lists that CN Android project needs will be generated first in Eclipse by building bridge with the CN database, and then embed them into project files.

Source Link

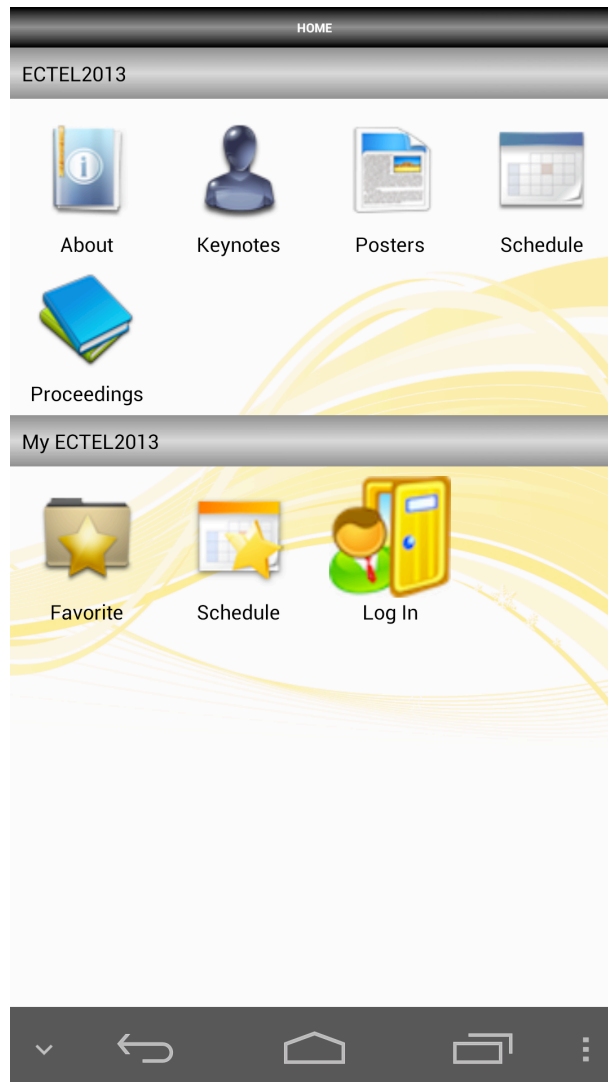
Conference Navigator official website:
<http://halley.exp.sis.pitt.edu/cn3/portalindex.php>

What I did

Update data for each conference

As one app is just for one conference, I need to update all data in the data files each time. The data covers information needed in About, Keynotes, Posters, Workshops, Schedule, Proceedings and other functions. What's more, one conference has its own matching theme color and logo, so the particular background image and icon also need to be displayed properly. The following pictures demonstrate the functions with new data after updating.

Main Interface (EC-TEL 2013)




About (EC-TEL 2013)

Introduction

ECTEL 2013

Tuesday, September 17 - Saturday, September 20
AT [Paphos, Cyprus](#)



The European Conference on Technology Enhanced Learning (EC-TEL) is a unique opportunity for researchers, practitioners, and policy makers to address current challenges and advances in the field. Through EC-TEL, established and emerging researchers as well as practitioners, entrepreneurs, and technology developers explore new collaborations, strengthen networks, and compliment their core experience.

Navigation icons: back, home, forward, and menu.

Keynotes (EC-TEL 2013)

Keynotes

Wednesday, September 18

Beyond Horizon: learning and technology in EC policies and programming
 4:00 PM - 5:00 PM
 At N/A

Thursday, September 19

Making Sense of MOOCs: The Evolution of Online Learning in Higher Education
 9:00 AM - 10:00 AM
 At N/A

Friday, September 20

ICT-enabled innovation for learning in Europe and Asia - Exploring conditions for scalability and sustained impact at system level
 9:00 AM - 10:00 AM
 At N/A

Introduction

Beyond Horizon: learning and technology in EC policies and programming

Wednesday, September 18 4:00 PM-5:00 PM
 AT [N/A](#)
 BY [Liina Munari](#)



Liina Munari is a senior research project officer at the European Commission, DG Connect, Unit G4 "Youth, Skills and Inclusion", based in Luxembourg. The unit is responsible for strategic planning, selection and monitoring of research and innovation projects in technology-enhanced learning and inclusion, funded by the 7th Framework Programme for Research (FP7) and the Competitiveness and Innovation Programme (CIP) of the European Commission. It also provides strategic policy guidance on learning and technology issues at the DG CONNECT, including Better Internet for Kids (BIK – formerly Safer Internet). Ms Munari is involved in all unit's research, innovation and policy work on technology-enhanced learning. Ms Munari has been working as an EU civil servant for her entire career since 1997. She has held various positions in different EU

Posters (EC-TEL 2013)

Wednesday, September 18

The Odder Experience on iPads in Schools: Reflecting on Digital Didactical Designs

At N/A

Interdisciplinary knowledge creation in Technology Enhanced Learning

At N/A

Transforming the campus into a digitally augmented learning space using etiquetAR

At N/A

Monitoring Learning in ABA Teaching of Children with Autism

At N/A

Enabling Educators to design Serious Games ? A Serious Game Logic and Structure Modeling Language (GLiSMo)

At N/A

JACK revisited: Scaling up in multiple dimensions

At N/A

IEEE-IST Academic: A web-based educational resources case-study

At N/A

Semantic Social Sensing for Improving Simulation Environments for Learning

At N/A

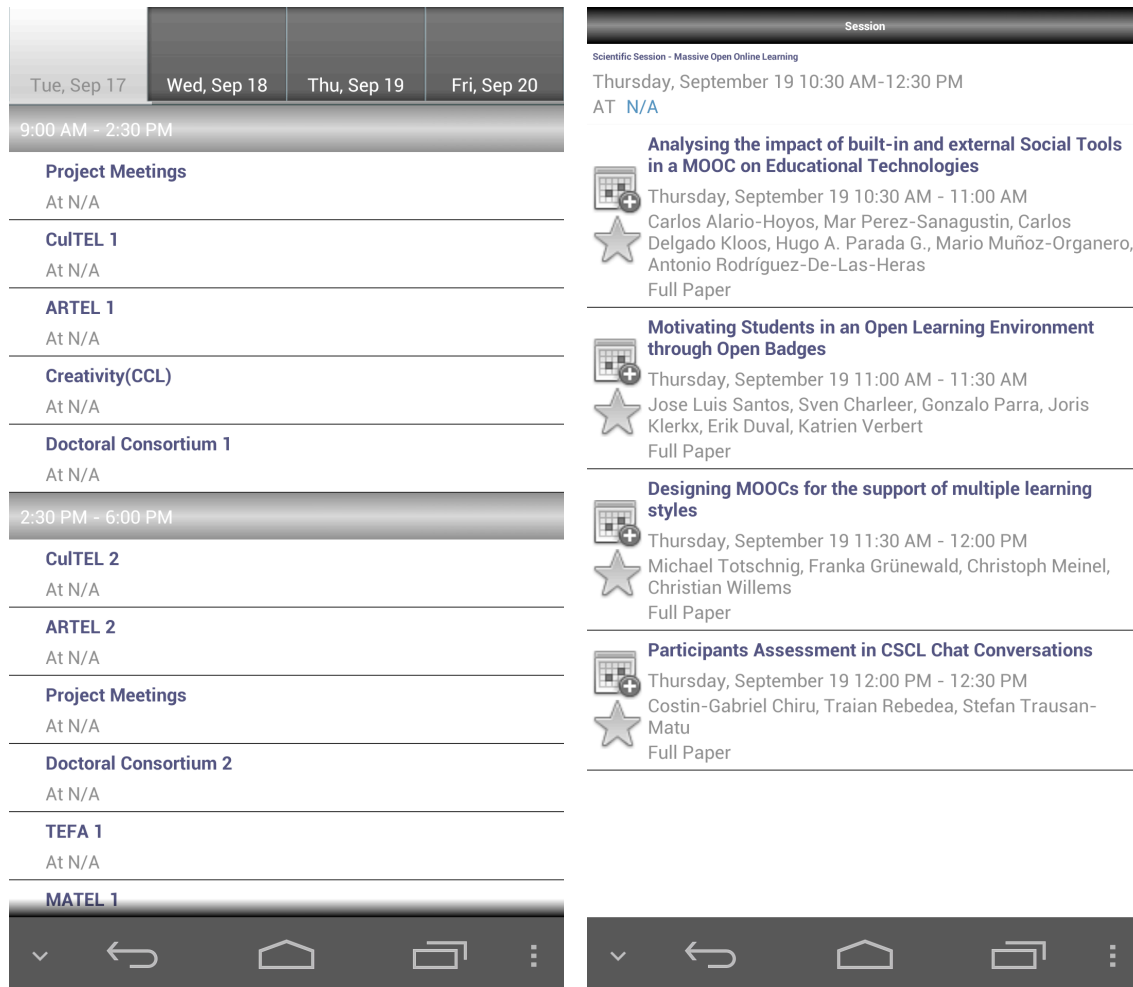
A generative computer language to customize online learning assessments

At N/A

A Context Modelling System and Learning Tool for Context-Aware Recommender Systems



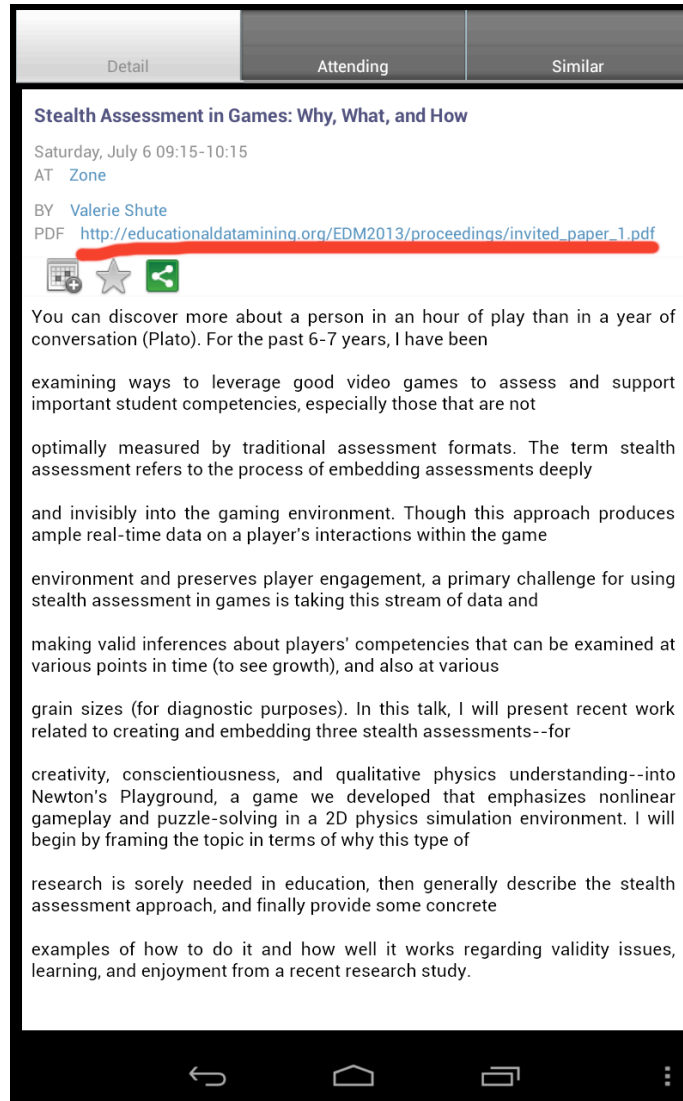
Schedule (EC-TEL 2013)



Add PDF Link function

In previous version, there is a paper PDF link deliver port that has not been finished in Paper Content pages. To complete this function, I checked the element names, sending and receiving methods, then found that the contentlink was set wrong, thus got incorrect value. After I adjusted the values, the PDF link displayed successfully. When clicking on the link, it shows the PDF page in Google Chrome app, and is also able to download the PDF file.

Paper Content (displaying PDF link)



PDF file downloaded after clicking on the link



Display Author Photos

Since receiving Professor Brusilovsky's advice, it is proper and clear if listing author's profile photo that is also the main speaker in Keynotes function. So I decided to add the images under title and above the keynote detail paragraph.

First I searched their photos online in Google. When found the appropriate images, I didn't copy and insert them into the project,

instead I recorded the linking address into data package. Then when user's device has connected with Wi-Fi, the images can be downloaded automatically inside and listed in the keynote detail page.

Keynotes with author photos

Introduction

Making Sense of MOOCs: The Evolution of Online Learning in Higher Education

Thursday, September 19 9:00 AM-10:00 AM
AT [N/A](#)

BY [John Daniel](#), [Stamenka Uvalic-Trumbic](#)





Sir John Daniel is one of the world's most eminent practitioners and thinkers in open, distance and technology mediated learning. He has helped to progress the international development agenda in education globally and has been a distinguished leader of universities and intergovernmental organisations in Canada, France and the United Kingdom. He obtained his full-time university education in Metallurgy at the Universities of Oxford and Paris and later demonstrated his commitment to lifelong learning by taking 25 years to complete a part-time Master's degree in Educational Technology at Concordia University. The internship for this programme, which took him to infant UK Open University in 1972 was a life-



Switch Log in / Log out Functions

In previous version, ever since user exit logging if already logged in, the logging button would show Log out, and the only way to solve it was reinstall the whole application. Although it is really a fact that the user has signed out, it is unreasonable for a mobile app to show log out all the time because he/she probably to sign in again. As the interface is presented by XML file in android project, I searched the layout package to find the XML file controlling sign in/ sign out. I corrected the value deliver to be more reasonable by avoiding Log out, but linking with Log in directly.

Conclusion and Future Work

As this is an independent study course, I think it is not just for finishing a project, but more important, is to learn the programming methods and gain coding skills. After the whole summer, I have acquired fully knowledge about JAVA and MySQL, in addition, gained the ability of Android development processing. During this period, I should appreciate Professor Brusilovsky and Xidao Wen a lot, for they gave me many good suggestions and solutions to conquer problems. Second, thank PAWS Lab and Yijing Wu, who contributed most to the iConference project as the original pioneers.

In the future, there indeed are some tasks needing to be enhanced. On the present situation, we need to build a truly available refresh function, as it would be quite inconvenient to uninstall and download a new version if there is merely a tiny updating or change in database. What's more, as Conference Navigator is determined to improve users experience at conferences, the conferences are better to be nested and shown in a single application that is like the website version, not demonstrated separately. In addition, beautifying the app page is also a good way to make users more comfortable.

App Links in Google Play:

UMAP 2013

<https://play.google.com/store/apps/details?id=umap.com&hl=en>

AIED x EDM 2013

<https://play.google.com/store/apps/details?id=aied.com&hl=en>

i-KNOW 2013

<https://play.google.com/store/apps/details?id=iknow.com&hl=en>

EC-TEL 2013

<https://play.google.com/store/apps/details?id=ectel2013.com&hl=en>