
TRANSPORT4YOU PROJECT PHASE II

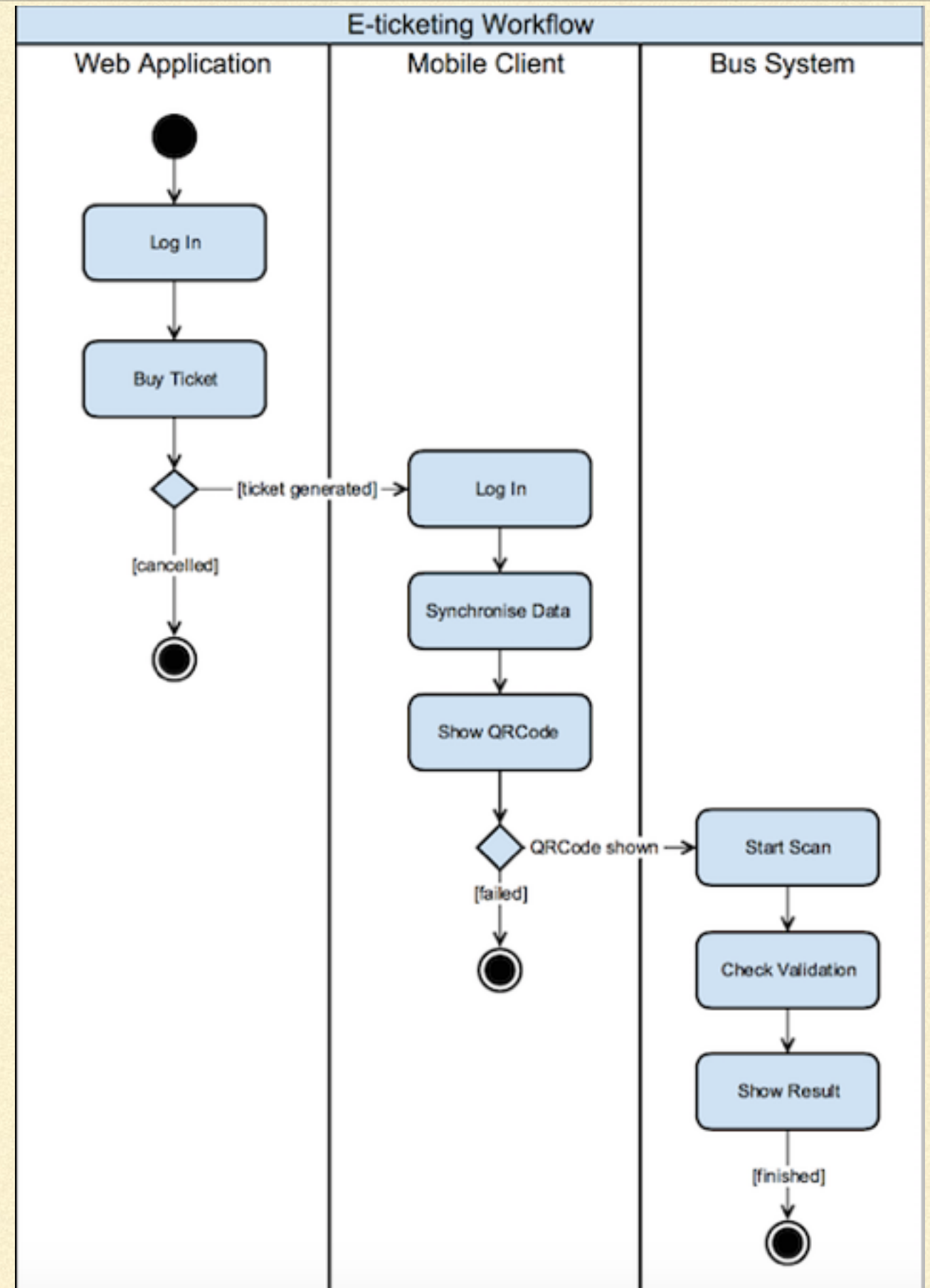
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OVERVIEW



- What we have done ...
- Removing useless functions: bluetooth & wifi connection
- Replacing them with QRCode and camera
- Making the system more usable

WORKFLOW DIAGRAM



MAIN CONCEPT

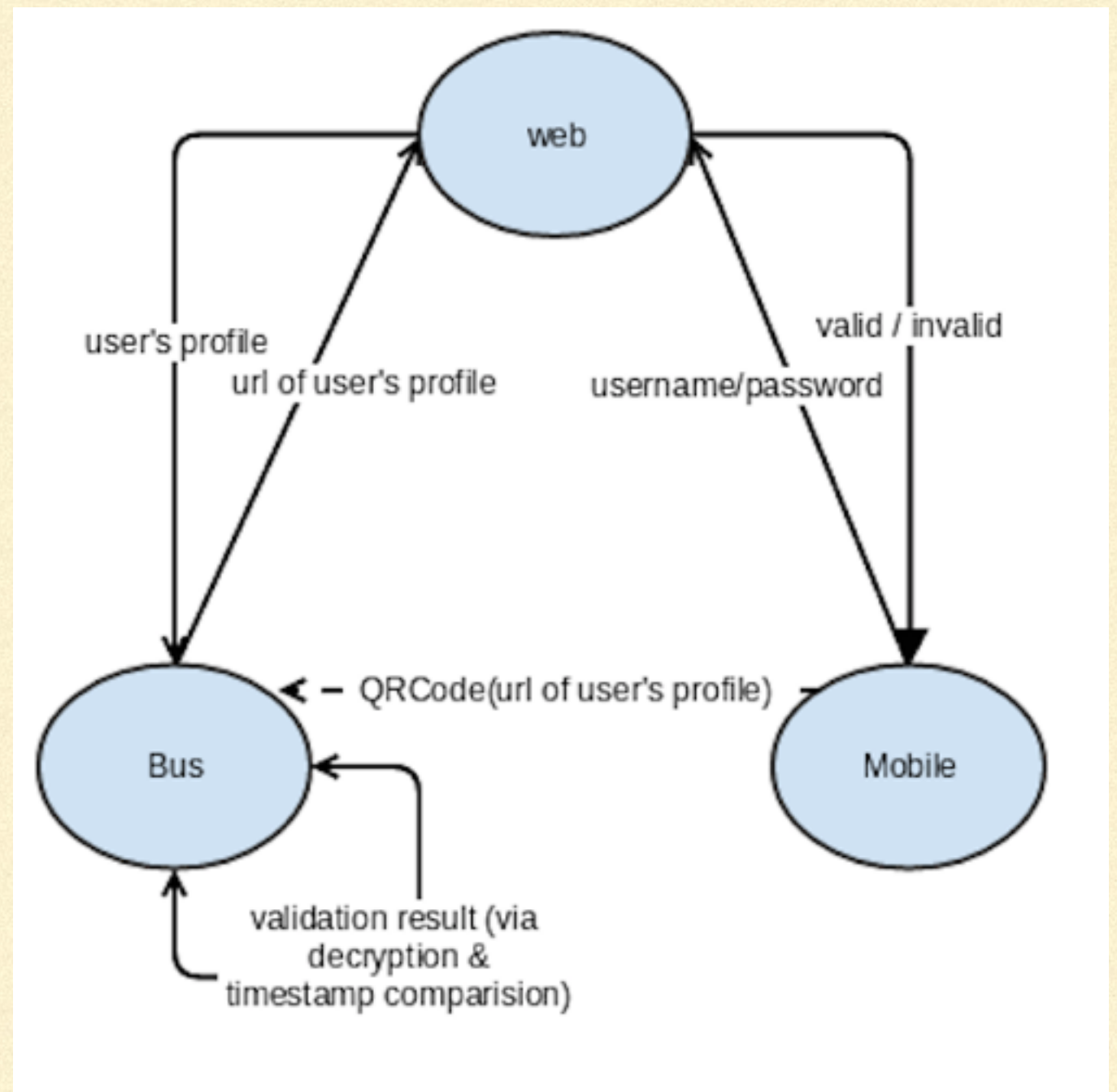
- How it is supposed to be.....
 - HMac: validation string = Hash (message + Hash (privateKey + message))
 - QRCode : message + validation string
 - Validation: the expected Hash is generated on Bus and compared with received Hash
 - How we solved it
 - URL of the user's profile is stored in QRCode
 - The bus visits the URL and validates the signed ticket by the local public key
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DATA FLOW

Web \longleftrightarrow Mobile:
logging in authentication

Mobile \longleftrightarrow Bus:
QRCode

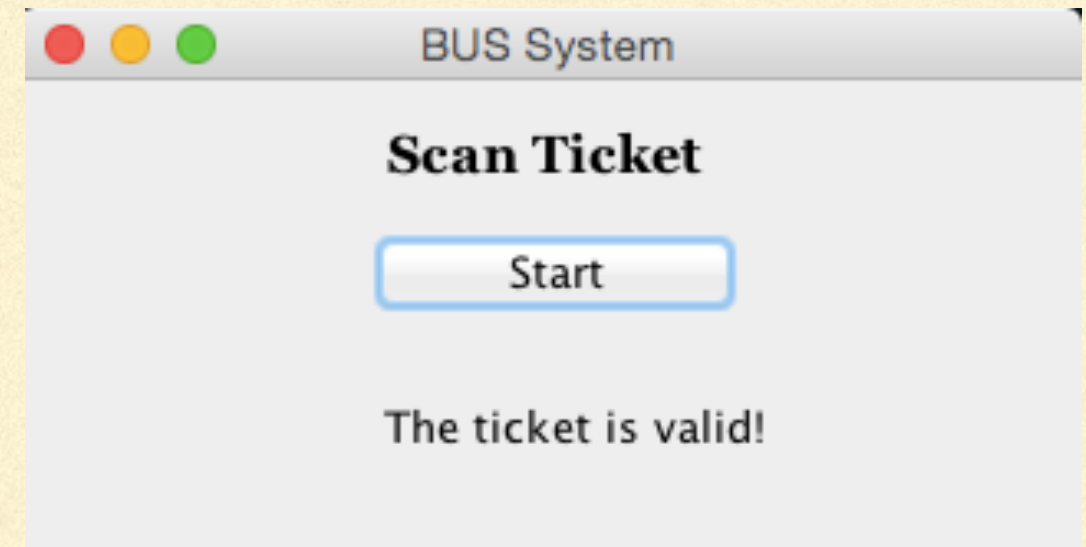
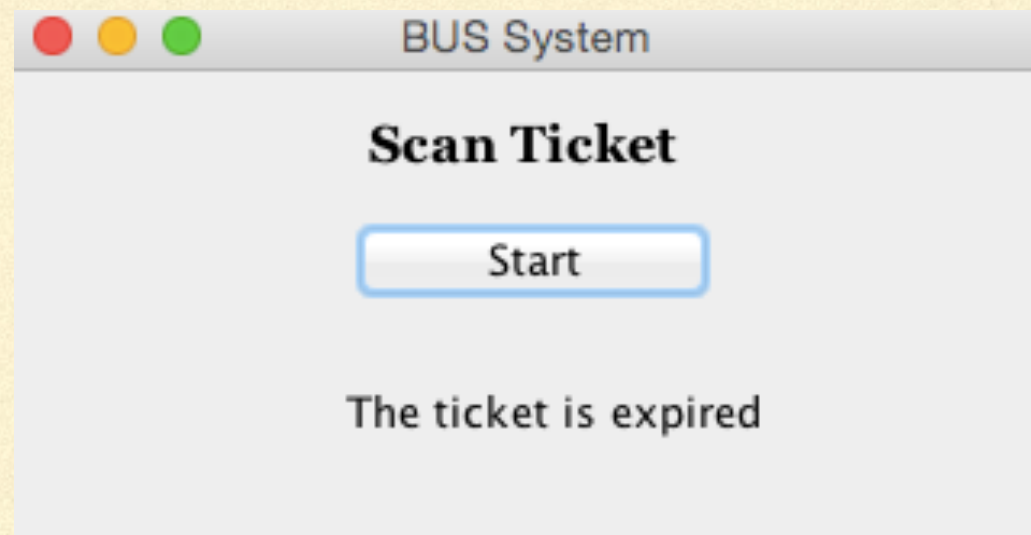
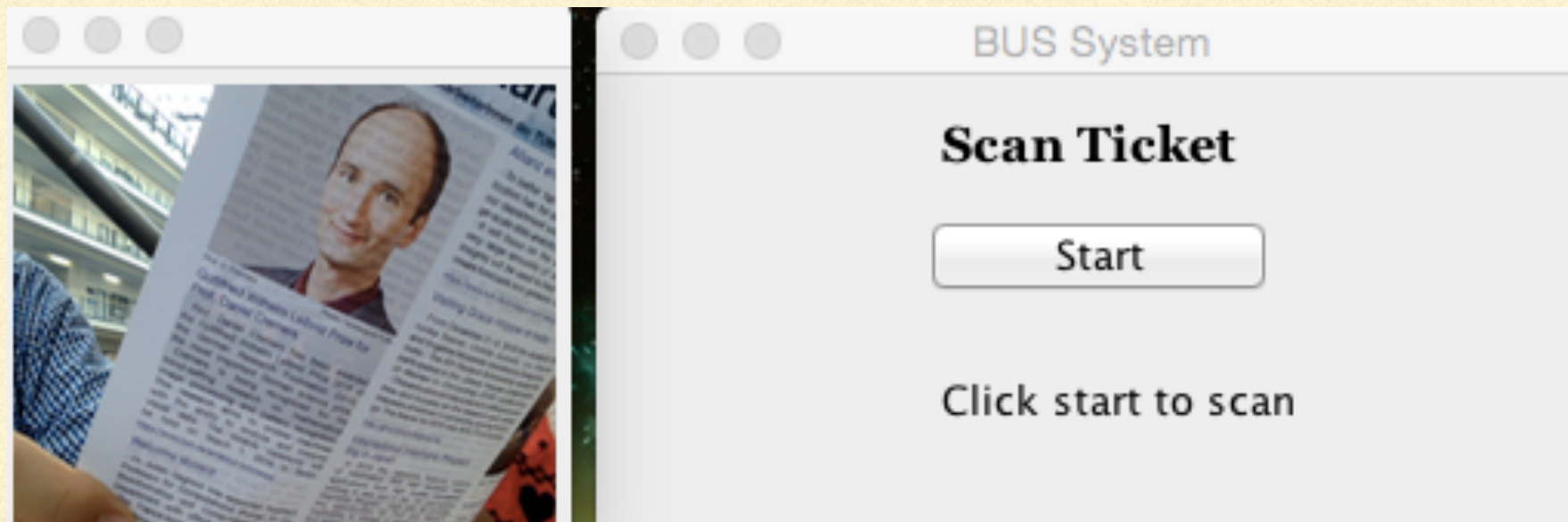
Web \longleftrightarrow Bus
fetching user's profile



NEW FEATURES

- Application entrance via GUI to run Bus
 - In the past, to use the bus application we have to keep all the background listening threads running all the time...
 - Now, we only need to run the GUI and the services can be triggered by clicking the button...
 - A lot of resources are saved
 - More user-friendly
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BUS GUI



THANK YOU FOR YOUR
ATTENTION ^^
