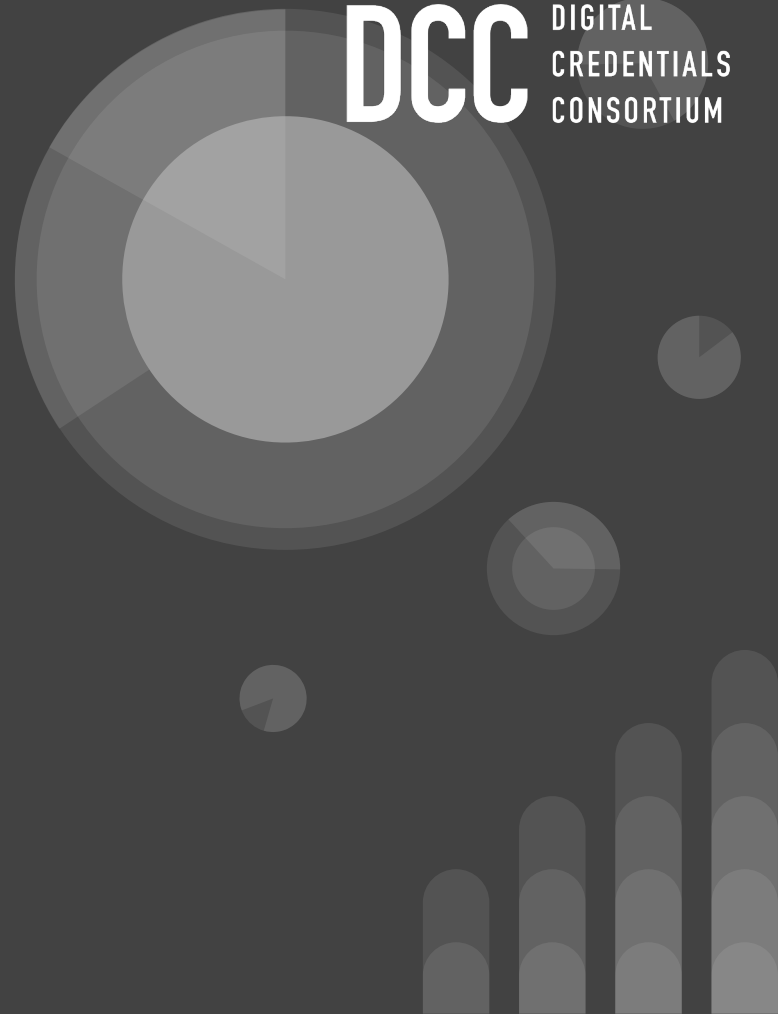# Learner Credential Wallet

Brandon Muramatsu, MIT
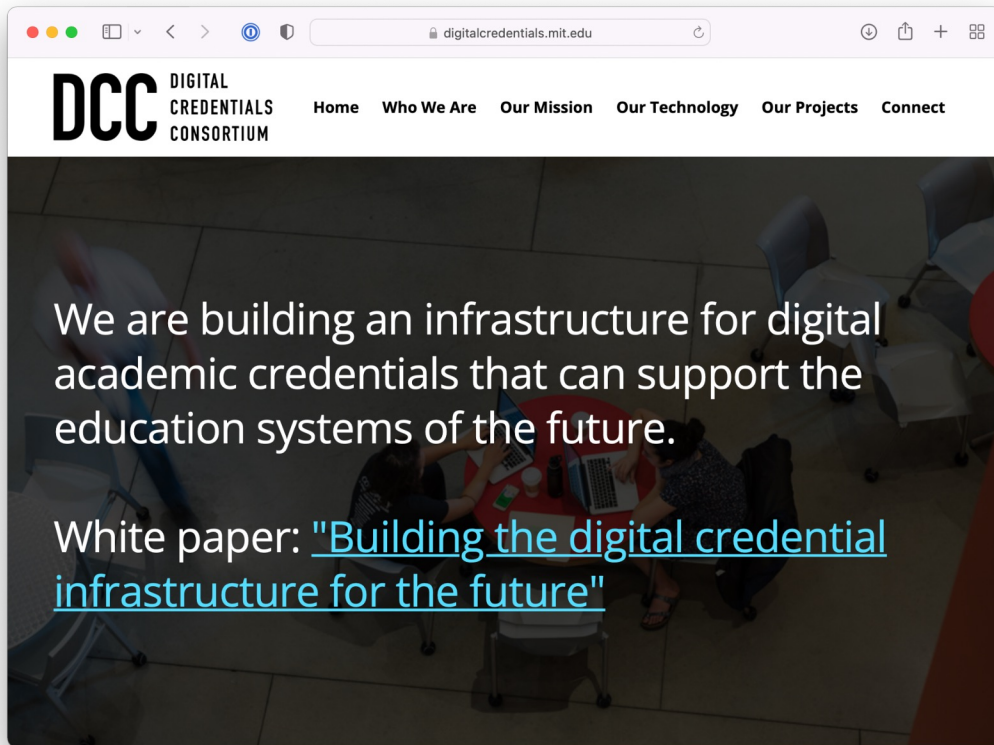
Digital Credentials Consortium (DCC)

VISION

Create an education landscape that increases learner agency and promotes more equitable learning and career pathways

MISSION

Create a trusted, distributed, and shared infrastructure that is the standard for issuing, storing, displaying, and verifying digital credentials

We are building an infrastructure for digital academic credentials that can support the education systems of the future.

White paper: "Building the digital credential infrastructure for the future"

Whitepaper: bit.ly/DCC-whitepaper

12 Founding Members

Delft University of Technology (Netherlands)

Georgia Institute of Technology (USA)

Harvard University (USA)

Hasso Plattner Institute, Potsdam (Germany)

Massachusetts Institute of Technology (USA)

McMaster University (Canada)

Tecnológico De Monterrey (Mexico)

Technical University of Munich (Germany)

University of California, Berkeley (USA)

University of California, Irvine (USA)

University of Milano-Bicocca (Italy)

University of Toronto (Canada)

Guiding Principles | Values

Learners - Commitment to learner agency and participation
- Learners retain primary control over their credentials

Issuers - Commitment to issuer control of the design of the credential
- Issuers control to whom they issue credentials, the particular achievement that the credential represents, and which credential options are available to the learner

Trust - Commitment to open processes, open standards, and software
- Credentials can be verified without consulting original issuer

DCC **DIGITAL CREDENTIALS CONSORTIUM**

Guiding Principles | Values

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DCC DIGITAL CREDENTIALS CONSORTIUM

How does DCC do its work?

- Develops open standards, open source reference libraries, core infrastructure services
  - W3C Verifiable Credentials for Education (W3C VC-EDU)
  - Invited expert to IMS Global on Comprehensive Learner Record and Open Badges v3 specifications
  - Connect to international efforts (in particular EU, EBSI, Europass)
  - https://github.com/digitalcredentials
- DCC members build and launch pilots
  - Supported through Technical Working Group (DCC TWG)
- Future: Strengthen vendor relationships / pilots

DCC DIGITAL CREDENTIALS CONSORTIUM

About the Open Source Wallet Project
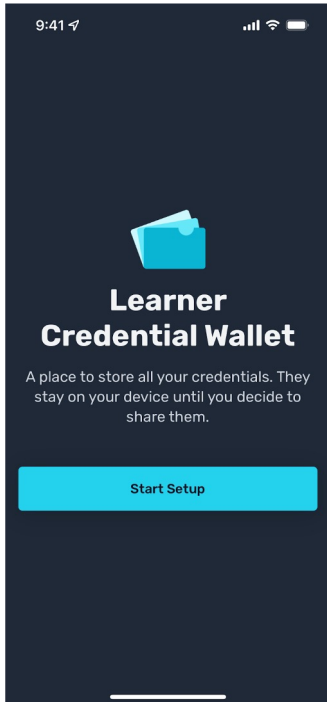
- Key component of digital credential ecosystem
  - Prioritizes learner agency
  - Prevents lock-in
  - Establishes reference implementation
- Wallet specification released (May 2021)
- Open-source code hosted on Github (Dec 2021)
- iOS and Android mobile apps published (Feb 2022)
- Deployment pilots with U.S. institutions:
  - Georgia Tech, College Unbound, San Jose City College
- Funded by Department of Education, Walmart

9:41

Learner Credential Wallet

A place to store all your credentials. They stay on your device until you decide to share them.

Start Setup

MIT | Open Learning

Learner Credential Wallet Specification

Published May 2020
https://digitalcredentials.mit.edu/docs/Learner-Credential-Wallet-Specification-May-2021.pdf

- Implements W3C Verifiable Credentials Data Model
- Informed by LER Wrapper and Wallet Specification for functional requirements
- Based on Universal Wallet 2020 Interoperability Specification
- Thanks to VC-EDU for input!

Defines the Minimum Viable Product implemented as the Learner Credential Wallet for iOS and Android

MIT | Open Learning

Learner Credential Wallet

A place to store your digital learner credentials

Download on the App Store

GET IT ON Google Play

Learner Credential Wallet is an open source mobile wallet developed by the Digital Credentials Consortium, a network of leading international universities designing an open infrastructure for academic credentials.

Key Features in Learner Credential Wallet

- iOS and Android
- Wallet is entirely stored on the mobile device: no user account, password to secure wallet
- Add VC-based credentials from a:
  - deep link from a registered issuer
  - QR code, either fully contained or deep link
- Supports diploma-like or program certificate-like credentials
- Preview credential as human readable template or JSON
- Share credential using mobile OS share sheets (as JSON VP, can be multiple VCs)
- Backup and Restore wallet (unencrypted)
- Delete Credential

MIT | Open Learning
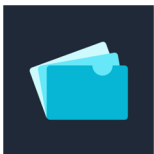
Two Demos of the Learner Credential Wallet

1. Adding a credential from a Learning Management System

   - Uses `lti-issuer` and `cred-admin`
   - Work led by DCC member Georgia Tech
   - Issues a VC from Canvas LMS to Learner Credential Wallet

2. Adding a credential from an email deep link after authentication

   - Uses `sign-and-verify`
   - Offers a deep link to the user, which after authentication, issues a VC to Learner Credential Wallet

Demo 1

Live demo of Learner Credential Wallet

Adding a Credential from the Canvas Learning Management System

Demo 2

Sample Email from San Jose City College

Dear SJCC Jaguar,

Thanks for participating in the Technest Digital Credential Pilot.

To get started, from your **mobile phone**:

1. Install **lcw.app**
2. [Download your credential](#) (you'll have to login with SJCC so can make sure we're issuing the digital credential to you)

Learner Credential Wallet
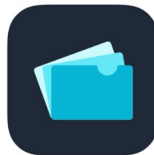
A place to store your digital learner credentials

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‹ Search

Learner Credential Wallet
Store your learner credentials

TestFlight version 1.1.9 is installed.
View in TestFlight

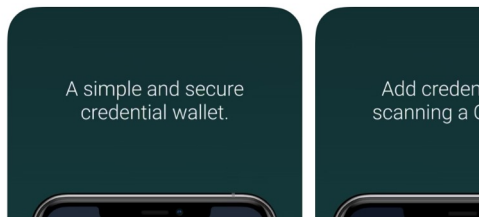| AGE	CATEGORY	DEVELOPER
4+ Years Old	🌐 Education	👤 Massachusetts Inst

What's New

Version History

Version 1.1.9   6d ago

Bug fixes and UI updates. Support for did:web signed credentials, swipe to delete, and more.

Preview

A simple and secure credential wallet.

Add creden scanning a Q

| Today | Games | Apps | Arcade | Search |

←

🔍 ⋮

Learner Credential Wallet
MIT

| Uninstall | Open |

What's new •
Last updated Mar 24, 2022   →

Add support for more issuers.

Rate this app
Tell others what you think

☆ ☆ ☆ ☆ ☆

Write a review

Developer contact   ⌄

About this app   →

A place to store your digital educational credentials

Education

9:41

Learner Credential Wallet

A place to store all your credentials. They stay on your device until you decide to share them.

Start Setup

9:41

Password

Setup a password to secure your wallet. You will not be able to recover a lost password.

Password

Confirm Password

Cancel   Next →

9:41

Creating Wallet

This will only take a moment.

✓

Take Me To My Wallet

9:41

Looks like your wallet is empty.

Add Credential ⊕

Sample Email from San Jose City College

Dear SJCC Jaguar,

Thanks for participating in the Technest Digital Credential Pilot.

To get started, from your **mobile phone**:

1. Install [lcw.app](lcw.app)
2. **Download your credential** (you'll have to login with SJCC so can make sure we're issuing the digital credential to you)

Add Credential

To add credentials, follow an approved link from an issuer (most often a University) or use the options below.

Scan QR code

"Learner Credential Wallet" Wants to Use " sjcc.edu " to Sign In

This allows the app and website to share information about you.

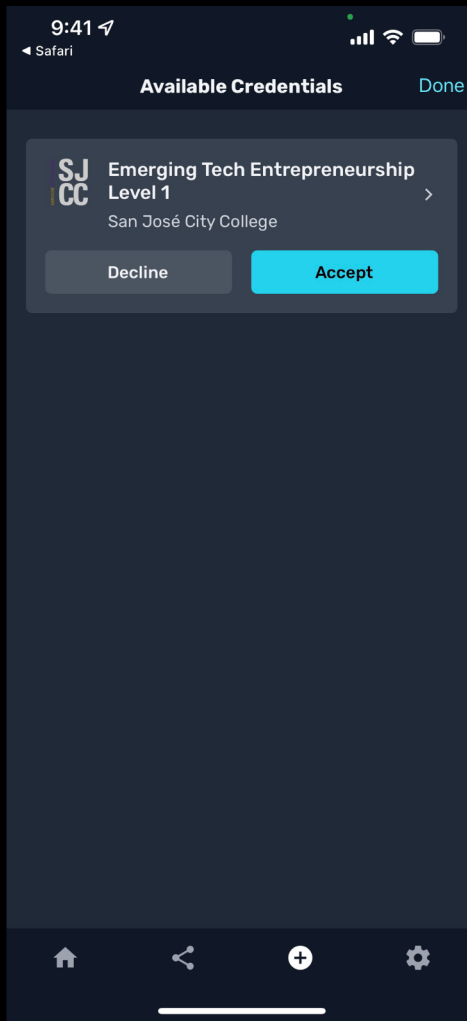Cancel   Continue

SJECCD SECURE LOGIN

Username

Enter your username

Password

Enter your password

Login

Unlock/Reset Password | Change Password

First time sign-in for students, please visit our ITSS Help Desk Portal Knowledge Base

If you are experiencing login issues where browser is landing back on this page, **PLEASE CLEAR BROWSER CACHE**, close browser and try again.

san josé·evergreen
COMMUNITY COLLEGE DISTRICT

san josé·evergree
COMMUNITY COLLEGE DISTRIC

SAN JOSE
CITY COLLEGE

SJCC VC Credential Data

name: Name of the credential

Emerging Tech Entrepreneurship Level 1

description: Textual description of the program / course / credential.

Students who complete the Emerging Tech Entrepreneurship certificates will be exposed to and become proficient in the coursework to become entrepreneurs in a technical field. This program combines the business skills necessary to make sound business decisions with the technical know-how to survive in the 21st century. Students will learn how to build and manage successful modern technical businesses.

SJCC VC Credential Data (continued)

issuer.name: The institution's name or Program name issuing the credential

San Jose City College

issuer.url: The institution's website address (URL)

https://www.sjcc.edu

issuer.image: URL to logo of the institution's choosing

https://www.sjcc.edu/_catalogs/masterpage/sjeccd/images/sjcity-logo.png

issuanceDate: The date the credential was issued

credentialSubject.name: Name of the individual receiving the credential

Questions?

Brandon Muramatsu, mura@mit.edu