## Certification: Assessment Prototype



- 1. User takes multiple-choice test online (any time!)
  - A combination of JavaScript and a web service
  - System selects number of questions randomly from a pool
    - The questions are managed with rigorous license agreement
  - System draws 4-5 responses from 10 possible responses (some randomized)
- 2. Choices are submitted to the web server
- 3. Manual approval of the result
- 4. Automatic creation of certificate and returned by email
  - Permanent computer-verifiable proof that skill is created
    - Return a text version with GPG signature
    - Return a link that can be verified on hpc-certification.org
- Privacy: minimize information stored on servers, keep some for statistics
- Includes some measure to prevent cheating and brute forcing (e.g., delay)

The Program

## Certification: Certificate



## Text representation

```
----BEGIN PGP SIGNED MESSAGE----
Hash: SHA512
HPC Certification Forum Certificate
This text confirms that "Jane Doe" has successfully obtained the certificate
"HPC driving license" (id: 1) at 02/2019.
Verification URL: https://hpc-certification.org/[...]
-----BEGIN PGP SIGNATURE-----
[...]
-----END PGP SIGNATURE-----
```

## Certificate

HPC Certification Forum

