



Supported Self-Driven Learning Operating System Skills

Standard & custom sets of skills.

Used in project-based learning and recognition (achievements)

Version 0.3

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Background

Skills can be Human or Technical.

Achievements are an aggregation of skills.

Achievements can be achieved by completing a project based on a template with associated skills.

The achievement is validated by the trusted learning partner.

le Project Template for “Certificate II in Animal Care” with its 30 associated skills.

Standard Skill Sets

https://en.wikipedia.org/wiki/Australian_Curriculum

<https://training.gov.au>

<https://www.asdan.org.uk/resources/>

Skills Sources

Domain Name	#
selfdriven	00
Australian National Curriculum	01
Pathways (MQ)	02
NSW Education	03
“selfdriven PBL” (PBLworks)	04
Primary Ethics	05
ASDAN https://www.asdan.org.uk/resources	06
Training.gov.au Skills https://training.gov.au	07

Skill Domains

Domain Name	#
Arts	21
English	22
Health-Physical-Education	23
Civics-Citizenship	24
Economics-Business	25
Geography	26
History	27
Languages	28
Mathematics	29
Science	30
Technologies	31
Work-Studies	32
Authentic Learning	33
Next Steps	34
Project Based Learning	35
Who Am I	36
Physical Movement	37
Physical Tactical	38
Physical Motivation	39
Physical Social	40
Training	41

Skills Capacities / Attributes

Type	Code	Description
Capable	C	Has a demonstrable understanding of the skill
Knowledgeable	K	Is knowledgeable about the skill. A specialise / raven based on effort (Cognitive).
Natural	N	Is natural at this skill with little cognitive effort. (Limbic)

Skill Unique Sequence

Part Name	Length	Example	
Source	2	AU National Curriculum	01
Domain	2	English	22
Skill	6	English Year 7	000007
Level	2	Level 1	01
Capacity	2	Capable	01
TOTAL	14		01-22-000007-01-01 # 01220000070101

Example

Domain	Gets It	Knowledgeable	Natural
English	English 11-1-C # 01220000110101	English 11-1-K # 01220000110102	English 11-1-N # 01220000110103
	English 11-2-C # 01220000110201	English 11-2-K # 01220000110202	English 11-2-N # 01220000110203

Example set of skills @

<https://docs.google.com/spreadsheets/d/1297IsOKrwQC3EIB1q4L7jd1DGoLspZib>

Tokenomics

Skills are stored on the Cardano blockchain using selfdriven SDI managed policy, with type = "skill".

Each skill has a globally unique number that can then be used by any learning ecosystem as a common reference point for learner capability growth via achievements as verified recognition of skills.

```
{
  "115100105": {
    "92be578d1c063b70edf9b2ca0b53c7a58142b65eba43a5b55bdd6cb7": {
      "SDI-skill": {
        "e4e4a9501a4648f48a71c37685c32e02": {
          "zone": "lab",
          "type": {
            "sdi": "707599e9-bf08-4881-a25a-061142b33ee2",
            "name": "skill"
          },
          "sdi": "e4e4a950-1a46-48f4-8a71-c37685c32e02",
          "name": "Canteen Supervisor-1-G",
          "reference": {
            "source": "00",
            "domain": "33",
            "skill": "000001",
            "skill-level": "01",
            "capacity": "01",
            "sequence-number": "00330000010101"
          },
          "notes": "selfdriven [00], Authentic Learning [33], Canteen Supervisor [000001], Level1 [01], Capable [01]",
          "url": [
            "https://",
            "identity.selfdriven.cloud/",
            "#skill/",
            "e4e4a950-1a46-48f4-8a71-c37685c32e02"
          ],
          "image": ["ipfs://", "bafkreigz7afau3e5xz5fdrrlgbc6ohp6wazvzbizy4t4pgtf3owgrngtl4"]
        }
      }
    }
  }
}
```

<https://drive.google.com/file/d/12EZtwJ6BvA2gnKyuML5gpmSpz5DXzpzf>

Project Templates for Achievements

Project templates are used to associate skills to a specific achievement

```
{
  "template":
  {
    "project":
    {
      "name": "acm10121",
      "title": "Certificate I in Animal Care Industry Pathways",
      "reference": "ACM10121",
      "url": "https://training.gov.au",
      "urlCaption": "training.gov.au",
      "version":
      {
        "number": "0.0.1",
        "date": "01 JUN 2022",
        "notes": "Initial set up"
      },
      "usage": "This is a template reach the achievement of Certificate I in Animal Care Industry Pathways (ACM10121).",
      "skill-capacities": [ "C", "K", "N"],
      "skills":
      [
        {
          "name": "Explore job opportunities in animal care and related industries",
          "reference": "ACMGEN101",
          "sequence": "074100000101??"
        },
        {
          "name": "Approach and handle a range of calm animals",
          "reference": "ACMGEN102",
          "sequence": "074100000201??"
        },
        {
          "name": "Assist in the care of animals",
          "reference": "ACMGEN103",
          "sequence": "074100000301??"
        },
        {
          "name": "Take responsibility for the health and welfare of animals in own care",
          "reference": "ACMINF101",
          "sequence": "074100000401??"
        },
        {
          "name": "Participate in workplace health and safety processes",
          "reference": "ACMWHS201",
          "sequence": "074100000501??"
        },
        {
          "name": "Use digital technology for short and basic workplace tasks",
          "reference": "FSKDIG001",
          "sequence": "074100000601??"
        },
        {
          "name": "Identify strategies to respond to short and simple workplace problems",
          "reference": "FSKLRG002",
          "sequence": "074100000701??"
        }
      ],
    }
  }
}
```

<https://drive.google.com/file/d/11nZ9U9BkwwCXX8Cs8r9tgPBmWUqJYwLH>

Once completed and validated by a trusted learning-partner the achievement is recorded on-chain using the selfdriven managed SDA policy.

```
{
  "11510097": {
    "96dd4df64ec0857af3a90ebdb5d3318fbef6774fe8c4b50e090af1c6": {
      "SDA": {
        "535591d747b44af88fbf549d62d22983": {
          "zone": "lab",
          "sda": "535591d7-47b4-4af8-8fbf-549d62d22983",
          "issued": {
            "to": {
              "sdi": "61fa1431-ca95-48be-beec-6a91c5a5f1bb"
            },
            "by": {
              "sdi": "3a22327d-eff6-4875-88ba-bd024709c295"
            },
            "date": "08 Dec 2021"
          },
          "skills": [
            {
              "sdi": "707599e9-bf08-4881-a25a-061142b33ee2"
            },
            {
              "sdi": "df711d36-d2af-46f9-8e96-3084f1ac913c"
            }
          ],
          "url": [
            "https://",
            "verify.selfdriven.cloud/",
            "#sda/",
            "535591d7-47b4-4af8-8fbf-549d62d22983"
          ],
          "image": ["ipfs://", "bafkreifrbe9f576hpl2ef2nosvig5vwkyxfsciov64ncaxp2hjkltiqoi"]
        }
      }
    }
  }
}
```

<https://drive.google.com/file/d/12S5Yp1ID9GX936cuS-cMoggDt4x8vQ3T>

Resources

- <https://www.aqf.edu.au>
- <https://training.gov.au>
- <https://www.asqa.gov.au>
- <https://www.teqsa.gov.au>
- <http://www.myskills.gov.au>
- <https://www.qilt.edu.au>
- <https://www.courseseecker.edu.au>
- <https://www.uac.edu.au>
- <https://www.universitiesaustralia.edu.au/policy-submissions/teaching-learning-funding/guidance-for-portability-of-australian-microcredentials/>
- <https://www.dese.gov.au/national-microcredentials-framework>
- <https://ministers.dese.gov.au/tehan/marketplace-online-microcredentials>
- <https://www.dese.gov.au/higher-education-publications/resources/national-microcredentials-framework>
- <https://federation.edu.au/future-students/study-at-federation/which-course/higher-education-short-courses/microcredentials>
- <https://www.tafensw.edu.au/study/types-courses/microcredentials>
- <https://data.com.au/researchmaster/higher-education-insight/the-3-reasons-why-australia-is-turning-to-microcredentials>