



# Agile Software Practice

BSc (H) Software Systems Development – Year 4

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# Student Info.

- Moodle:
  - URL: <https://moodle.wit.ie/course/view.php?id=209284>
  - Self-enrollment key : asp24
  - Used for assignment submissions only.
- Website:
  - URL: <https://tutors.dev/course/agile-practice-setu-deise>
  - All course material.
- Communications.
  - Slack workspace: <https://agilesetu.slack.com/>
  - Emails to @mail.wit.ie accounts.
- Contact hours: 1L (Online) + 3P
  - Emphasis on Practical skills.

# Agenda

- Software requirements
- The Software Development Lifecycle (SDLC)
- Module's focus
- Assessment.



A terminal window with a dark background and light-colored text. The prompt is 'diarmuidoconnor'. The first command is 'aws --version', which outputs 'aws-cli/2.2.28 Python/3.8.8 Darwin/19.6.0 exe/x86\_64 prompt/off'. The second command is 'node -v', which outputs 'v18.13.0'. The third command is partially visible as 'diarmuidoconnor'. At the bottom, a status bar shows 'φ You, 1 second ago Ln 44, Col 9 Spaces: 2 UTF-8 LF { }'.

```
diarmuidoconnor ~$ aws --version
aws-cli/2.2.28 Python/3.8.8 Darwin/19.6.0 exe/x86_64 prompt/off
diarmuidoconnor ~$ node -v
v18.13.0
diarmuidoconnor ~$
```

φ You, 1 second ago Ln 44, Col 9 Spaces: 2 UTF-8 LF { }

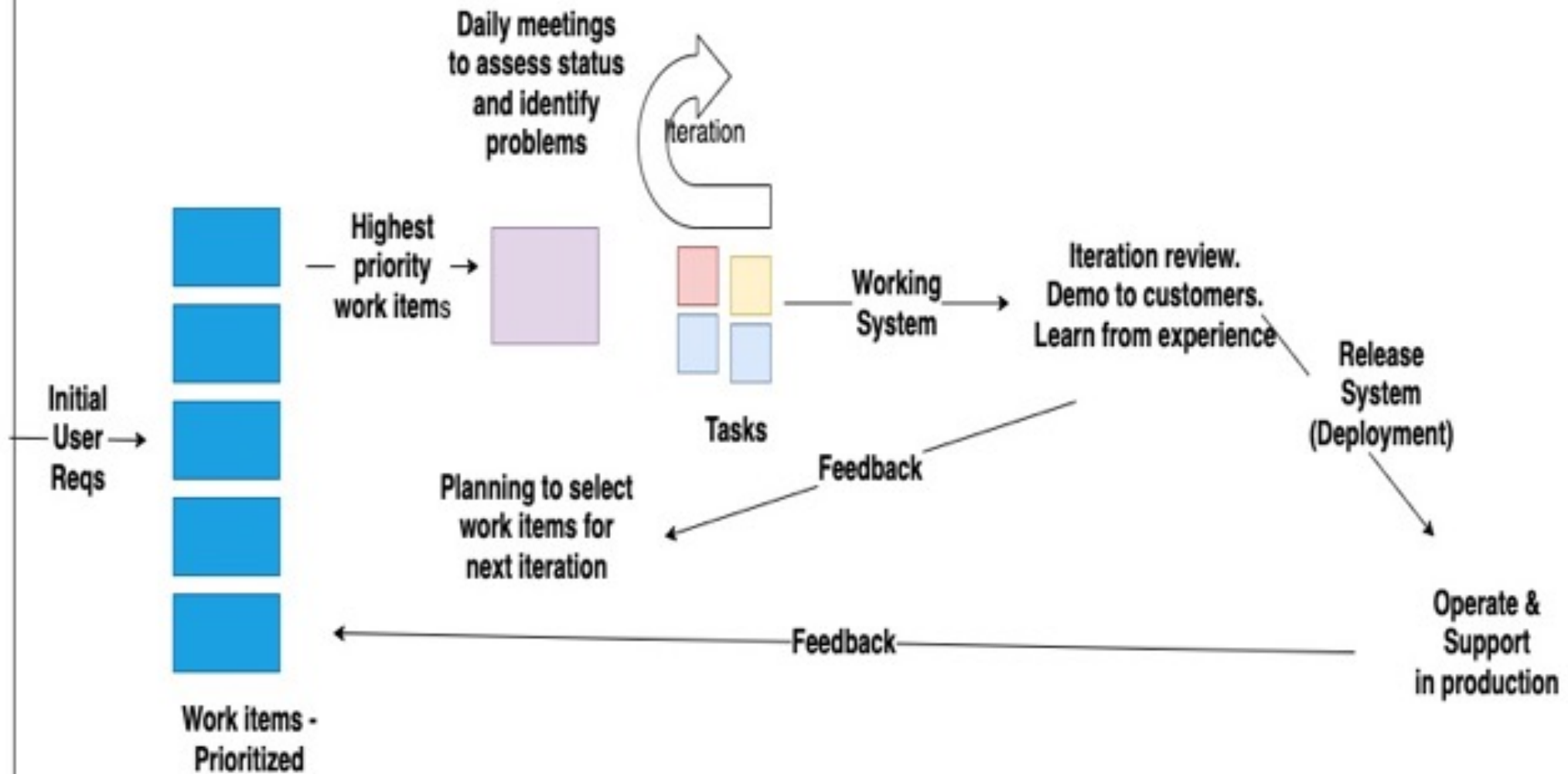
# Software requirements

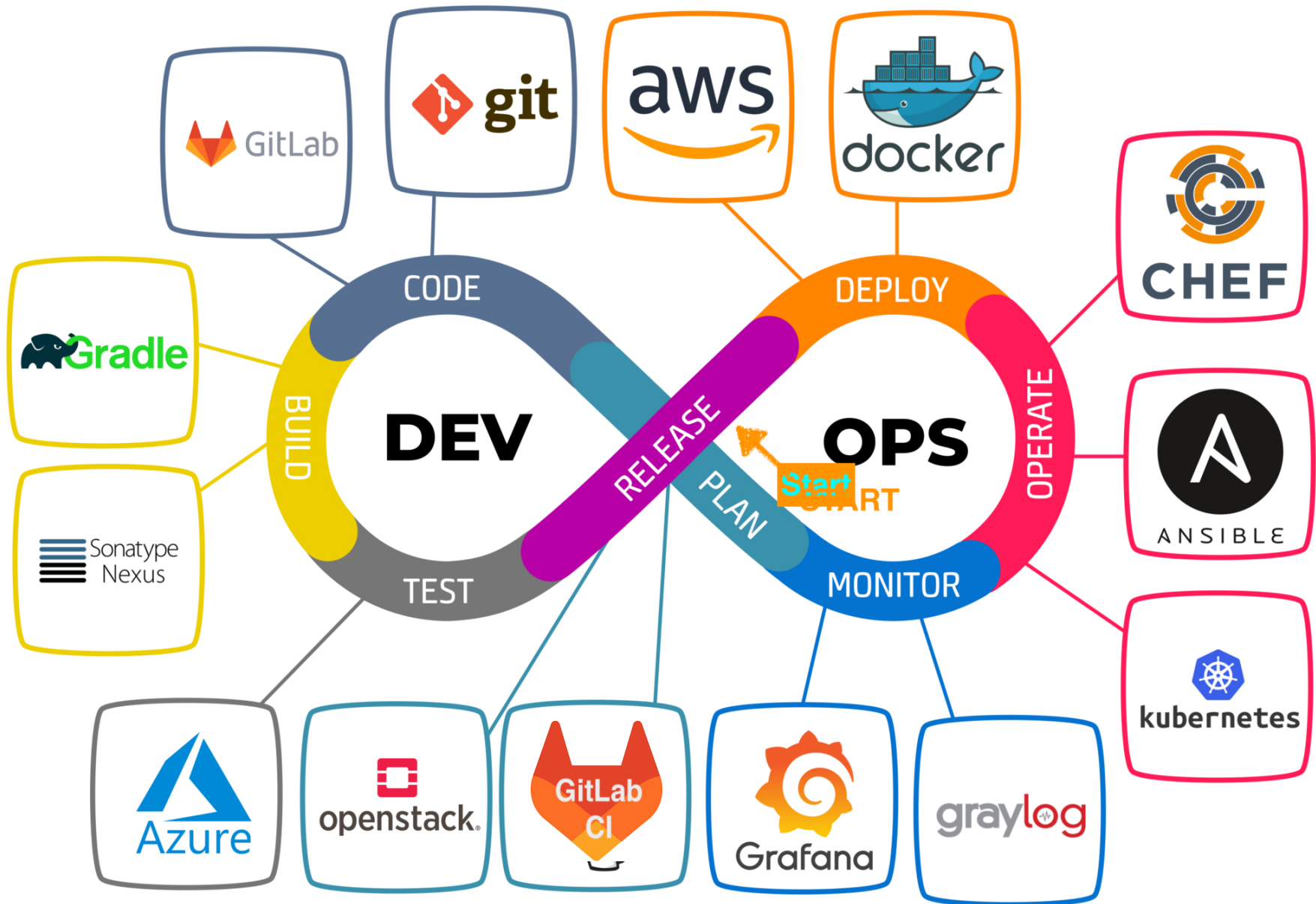
- Node.js – Locally; ~v20.x; See <https://nodejs.org/en/download/prebuilt-installer>
- Docker Desktop – Locally; See <https://www.docker.com/get-started/>
- The Git tool – Locally; See <https://www.atlassian.com/git/tutorials/install-git>
  - May already be installed (\$ git --help)
- VS Code editor – Locally; See <https://code.visualstudio.com/>
- A GitHub account
- A GitLab account – See <https://gitlab.com/>
- An AWS account – See

# The software development lifecycle (SDLC)

- Waterfall model.
- The Agile model.
  - An umbrella name
  - Scrum is the most popular instantiation.
  - Matured into the DevOps model.

## The Agile S/w Development lifecycle





# Module's focus.

- Our focus is on the tools and services to support software created in a dynamic (i.e. agile) development environments.
- Tool chain:
  - Docker (Build, Package, Deploy).
  - GitLab CI (CI/CD – Test → Release → Deploy)
  - Cypress, Mocha (Test).
  - AWS (Deploy).



# Assessment

- **100% CA.**
  - **Lab work: 10%**
  - **Assignments: 2/3 - 40%.**
  - **End-of-semester lab-based exam: 50%.**
  - **All approximates**