Federal University of Acre

Computer Science Postgraduate Program

Distributed Software Development

Course Outline

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Agenda

- Personal presentation
- Context/Motivation
- Program
- Dynamics
- Grading
- What is an academic master's degree?

Personal presentation

Personal presentation

- Who am I?
  - Assistant Professor
  - https://daricelio.github.io/
- Who are you?
  - Name
  - Graduation
  - Job
  - What is your definition for distributed software development?
  - What you expect for this course?

Context/Motivation

Distributed Software Development - DSD

- Development team geographically dispersed aiming to produce quality software.

https://www.comakeit.com/blog/wp-content/uploads/2018/02/Agile-distributed-development-is-a-great-fit-for-software-driven-businesses_blog.jpg

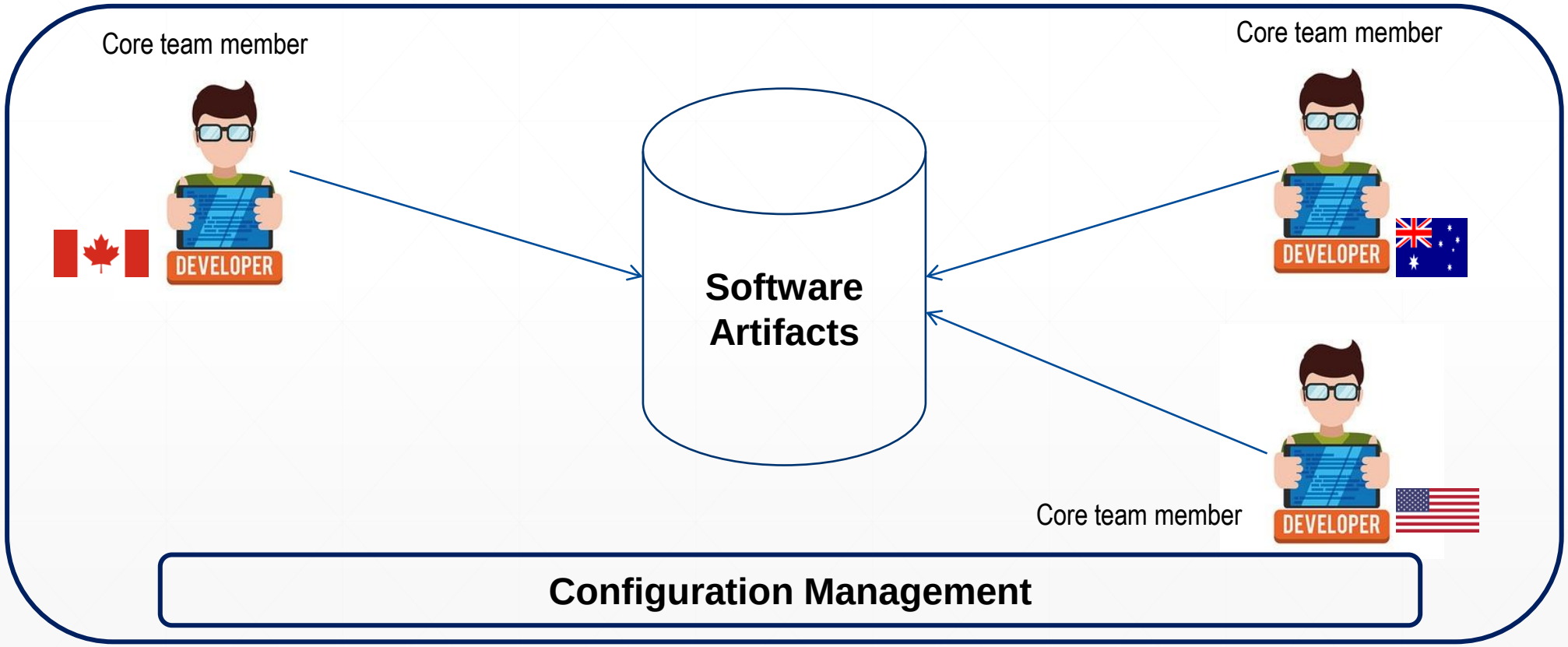
Distributed Software Development - DSD

- “OSS development projects are almost always collaborative and distributed. **Difficulties** imposed by distance, these projects have managed to produce large, complex, and successful systems”.

(Gutwin et al., 2004)

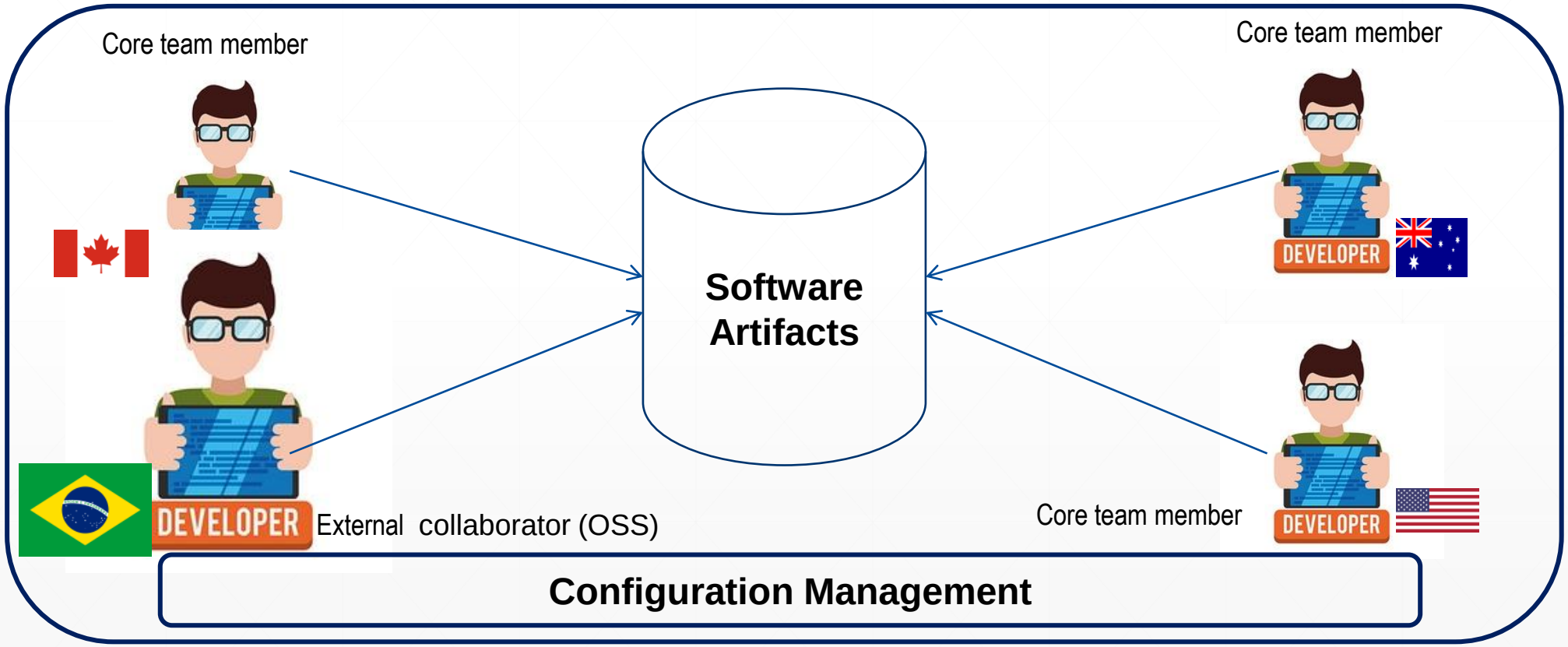
Distributed Software Development - DSD

Typical Scenario



Distributed Software Development - DSD

Typical Scenario



Distributed Software Development

- Challenges
  - Communication
  - Cultural differences
  - Timezone
  - Assigning Tasks
  - Collaboration

Course Program

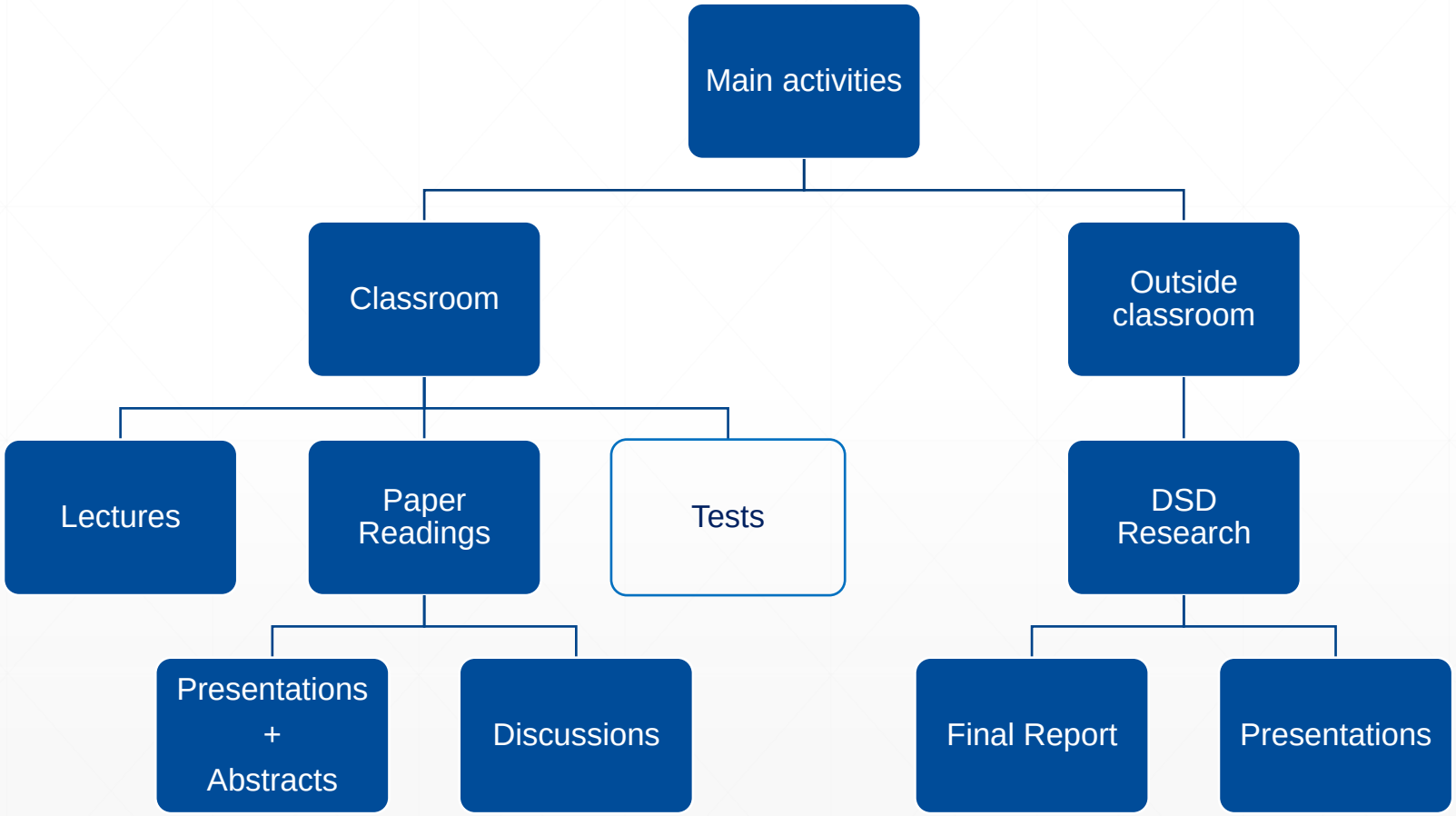
Program

- Discipline syllabus
  - Context; Historical Perspectives; Distributed Software Development Fundamentals; Distributed Development Paradigms; CASE tools; Current Topics in Distributed Software Development.

- Basic References
  - CHACON, SCOTT; STRAUB, BEN. Pro Git (2nd ed.). Apress, Berkely, CA, USA. 2014.
  - HIGTHSMITH III, J.A; ORR, K. Adaptive software development: a collaborative approach to managing complex systems. NY: Dorset House Publishing, 2014.
  - PRESSMAN, R. S; MAXIM, B. R. Software Engineering: A Practitioner's Approach. 8. ed. Mc Graw Hill Education, 2016.
  - SOMMERVILLE, Software Engineering. 10. ed. Pearson, 2015.

Course Dynamics

Dynamics


Main activities
Classroom
Outside classroom
Lectures
Paper Readings
Tests
DSD Research
Presentations + Abstracts
Discussions
Final Report
Presentations

Paper Readings

- All students should read all articles
  - Each student will be responsible for presenting seminars and/or producing a abstract from articles
  - The order of presentation will be defined by lottery
  - Seminar lasting 30 minutes
  - Using slides

Discussions

- In addition, the remaining students should interact according to schedule

Presentation	Questions	Weak points	Strong points
2	3	4	5
3	4	5	6
4	5	6	7
5	6	7	8
6	7	8	1
7	8	1	2
8	1	2	3

Schedule example

DSD Research

- Goal:
  - Practical in DSD perspective + Literature revision
  - Mine/Visualize DSD repositories
  - Study some advanced DSD technique
- Try to align the course project with your thesis theme
- Presentations + Final Report

Grading

Grading

- Score = (2 x Pp) + (1 x D) + (1 x T) + (2 x Rw))/6
  - Pp – Paper presentations
  - D – Discussions
  - T – Tests
  - Rw – Research Work

  - Approved
    - Presence ≥ 75% AND Score ≥ C (5,0)

What is an academic master's degree?

Questions?