Finite element based structural analysis
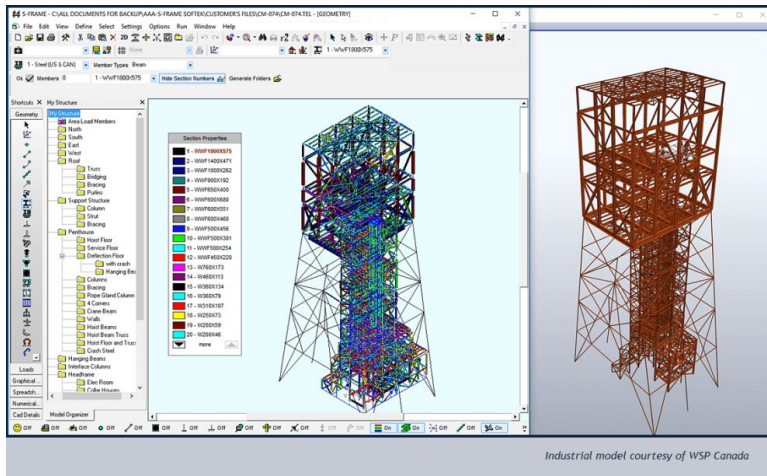
Group 20

E/14/158 Gihan Jayatilaka

E/14/339 Suren Sritharan

E/14/379 Harshana Weligampola

Problem

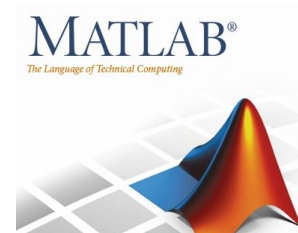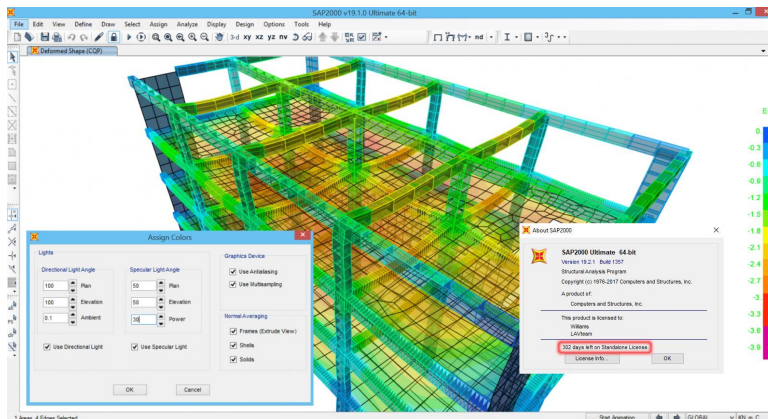Industrial model courtesy of WSP Canada

Predict
- Deformations
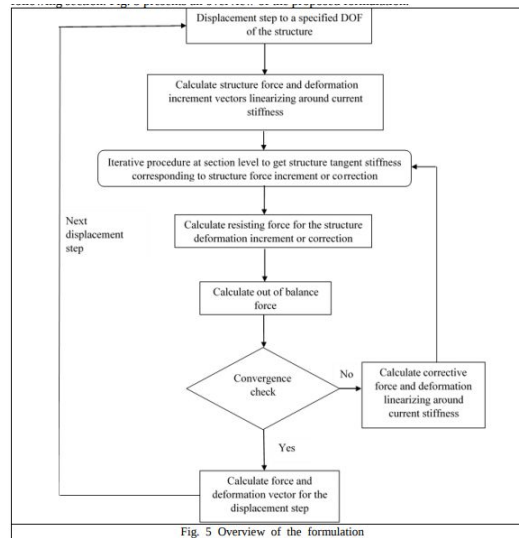- Failures of structures under different loading conditions

Linear/ Non-Linear

Time to solve

Solution

Algorithm
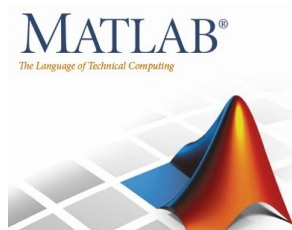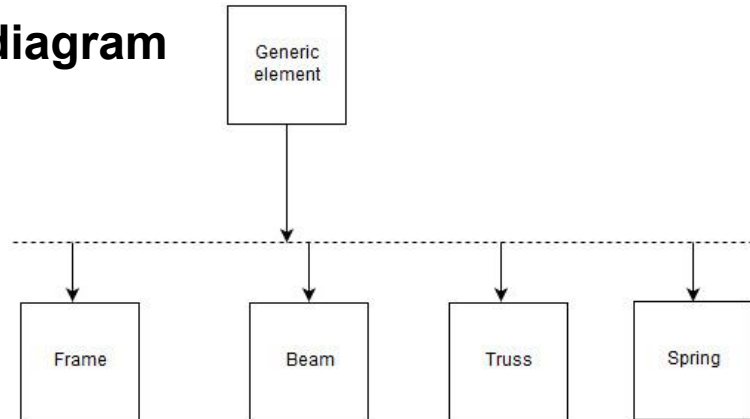

Fig. 5 Overview of the formulation

Fig. 8 Schematic diagram of element state determination
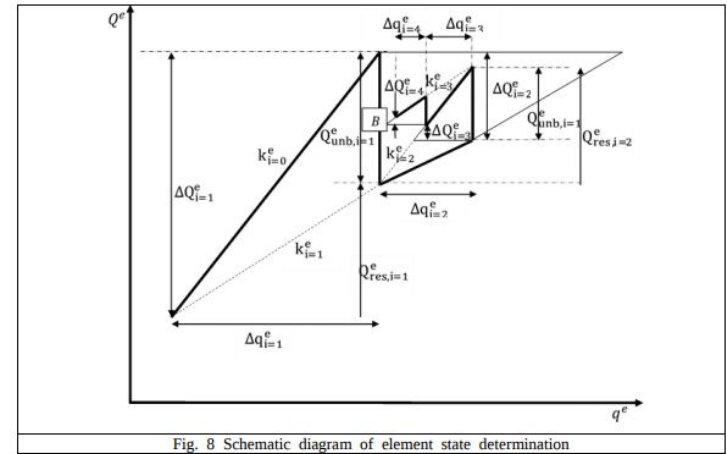
Technologies used

Design

Class diagram
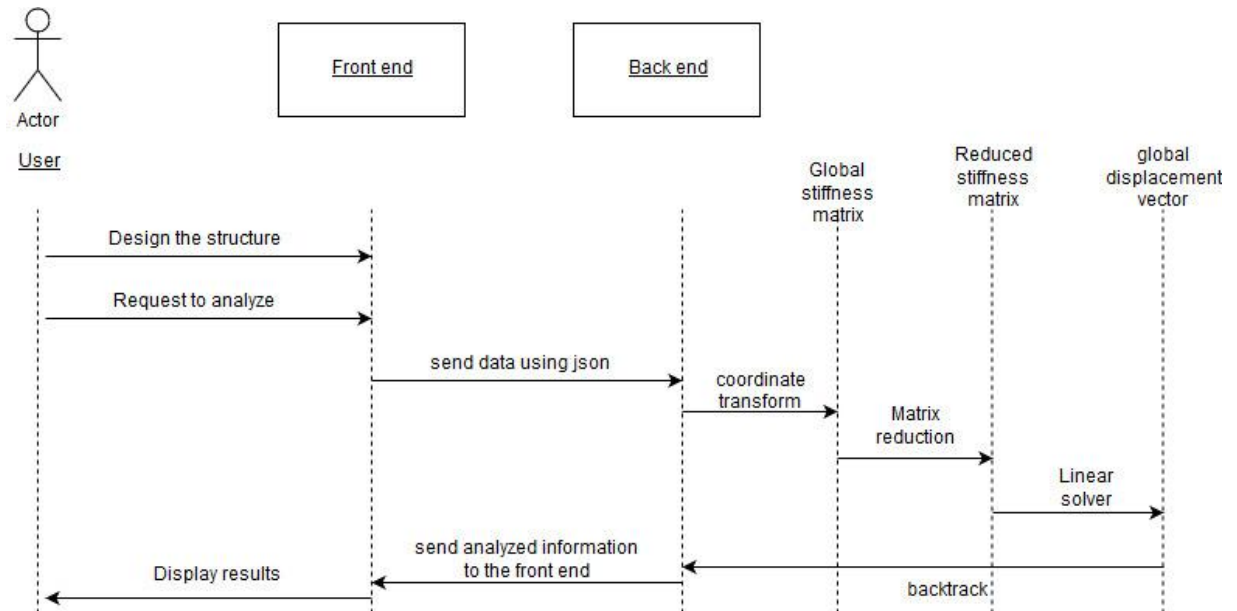
Release history
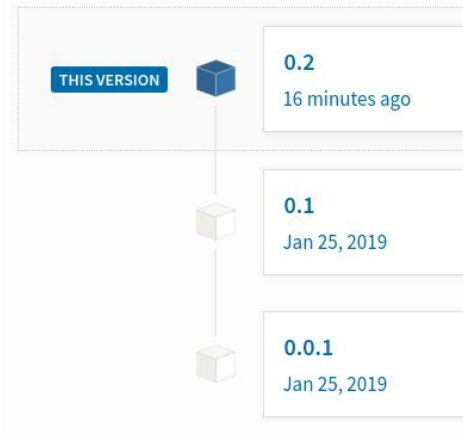
THIS VERSION — 0.2 — 16 minutes ago

0.1 — Jan 25, 2019

0.0.1 — Jan 25, 2019

Releases

Sequence diagram

Agile development
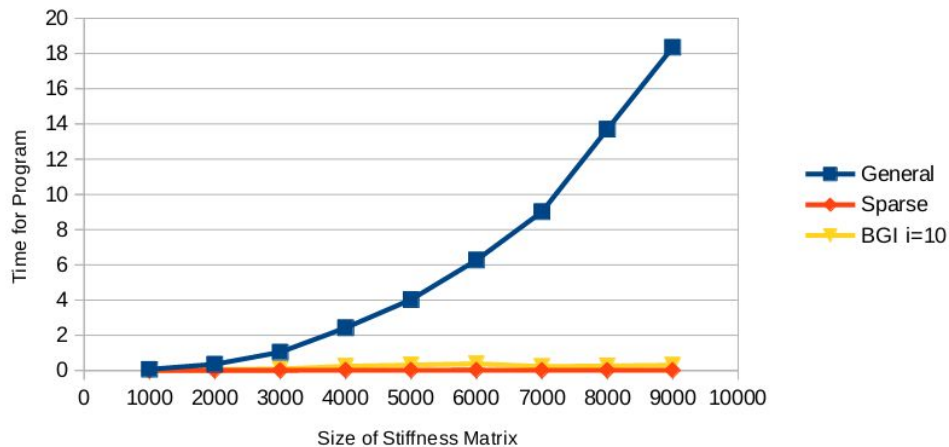
Team Involvement
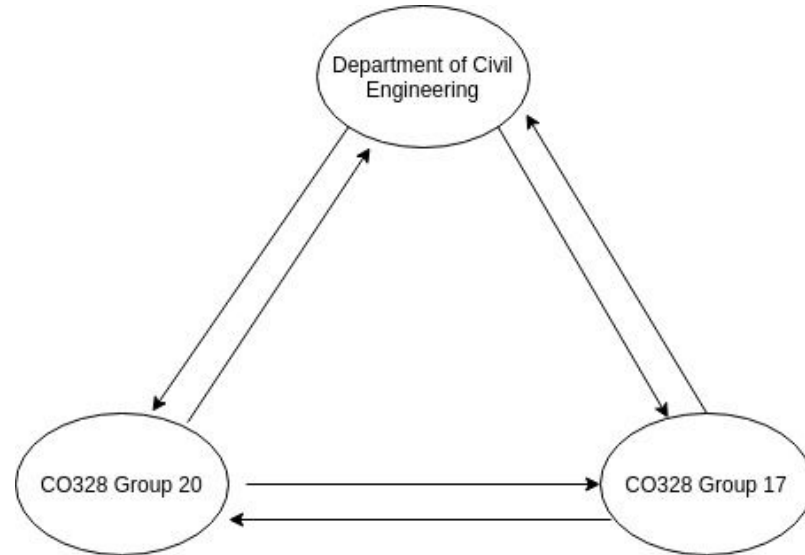
Continuous integration
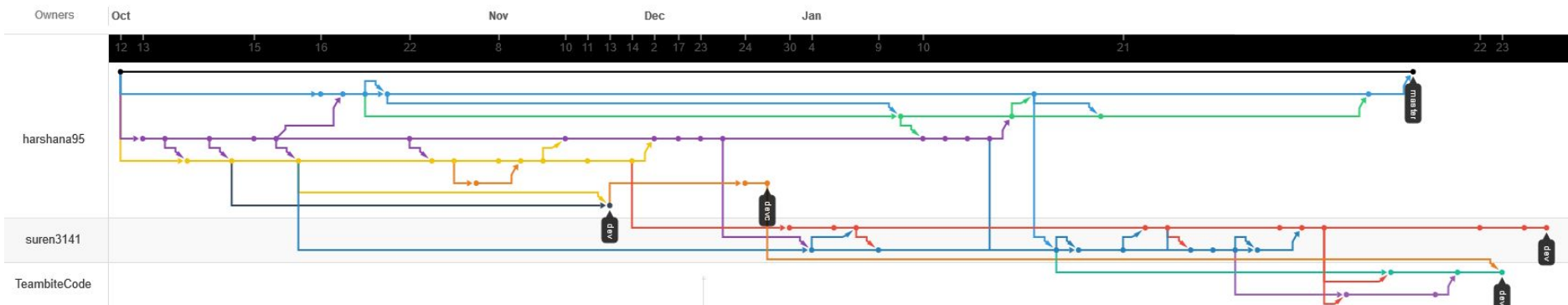
Testing

README.md

Test_Truss.py

Test_Truss_integration.py

Test_json.py

__init__.py

commands.txt

deeptest.py

demo.log

README.md

Run any of the following commands

python -m unittest Test_json -v python -m unittest Test_Truss -v

Usage testing

Performance testing of the program for different linear solvers

Performance testing

Demonstration

Thanks!

Any questions?

You can find us at:

http://TeambiteCode.com

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