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CSSI Frameworks: Future Proofing the FEM Library deal.II – Development and Community Building

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Finite element methods (FEMs) are used for the numerical solution of partial differential equations across disciplines.

deal.II is a large software library to support building FEM codes:
1.4M lines of C++; 1,400 publications;
220 authors; 10 changesets per day

This project:

- Continue to expand the user and developer communities
- Broaden support for GPUs and massively parallel computing
- Expand the range of documentation, tutorials, video lectures, summer schools
- Better support a wide range of platforms
- Implement foundational features too complex to obtain from the wider user-developer community

<https://www.dealii.org>