

# Seminar: Search and Optimization

## 6. Software Project

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# Roadmap

- Phase 1: **Uninformed search**  
Task: Implement some uninformed solver for your domain  
Submission deadline: 29 November 2012
- Phase 2: **Informed search**  
Task: Implement some heuristic solver for your domain  
Submission deadline: 10 January 2013
- Phase 3: **Improvements**  
Task: Improve your solver (depending on results after phase 2)  
Submission deadline: 31 January 2013

## Analysis

- Familiarize yourself with your domain
- How can you characterize it (e. g., size of state space, branching factor, complexity, ... )?
- What methods appear promising?
- Solve problems optimally or allow suboptimal plans?
- Consult your advisor

## Implementation

- C++
- First strive for **clean, readable** code, then optimize it for efficiency
- Get **feedback** from you advisor frequently and already at an early stage (e. g., discuss your architecture before implementing it)

## Evaluation

- Evaluate in each phase
- Plan your experiments: **What** do you want to find out?  
**How** can you accomplish this?
- As always, you are welcome to consult your advisor

Submission after each phase: Code and summary of evaluation results

## Next steps

Done: Assignment of projects and advisors

Next steps:

- Create mercurial repository and grant your advisor write access
- Schedule kickoff meeting with your advisor
- Your advisor will put the problem instances into your repository.