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# Chapter 6 - Procedural Content Generation in GVGAI

## Exercises

The GVGAI Framework is available in a Github repository<sup>1</sup>. Use the release 2.3<sup>2</sup> in order to run the same version presented here. This chapter proposes two procedural content generation challenges hosted by the GVGAI competition<sup>3</sup>.

Projects can be proposed within this context easily:

- Build a level generator that improves the sample level generators provided by the framework. You can run the level generators from the class `tracks.levelGeneration.TestLevelGeneration`.
- Analogously, you can build a rule generator from the sample ones provided. You can run the rule generation test from the class `tracks.ruleGeneration.TestRuleGeneration`.
- For both cases above, inspiration can be found in [1]. You can also submit your generator(s) to the yearly editions of the GVGAI competition.
- What is beyond rule generation? Could you create a generator that creates *complete* games in VGDL?

## References

1. N. Shaker, J. Togelius, and M. J. Nelson, *Procedural content generation in games*. Springer, 2016.

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<sup>1</sup> <https://github.com/GAIGResearch/GVGAI>

<sup>2</sup> <https://github.com/GAIGResearch/GVGAI/releases/tag/2.3>

<sup>3</sup> These exercises are also available at this book's website: <https://gaigresearch.github.io/gvgaibook/>