

bioWARP

Self-service statistics with shiny



Sebastian Wolf – July 17th 2019



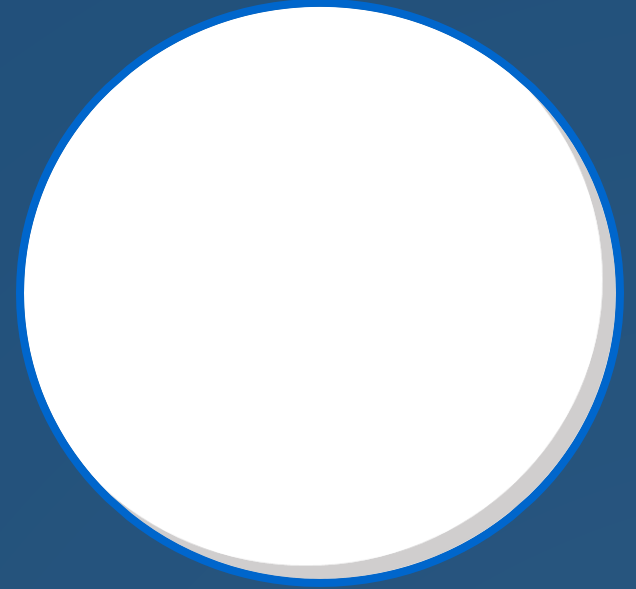
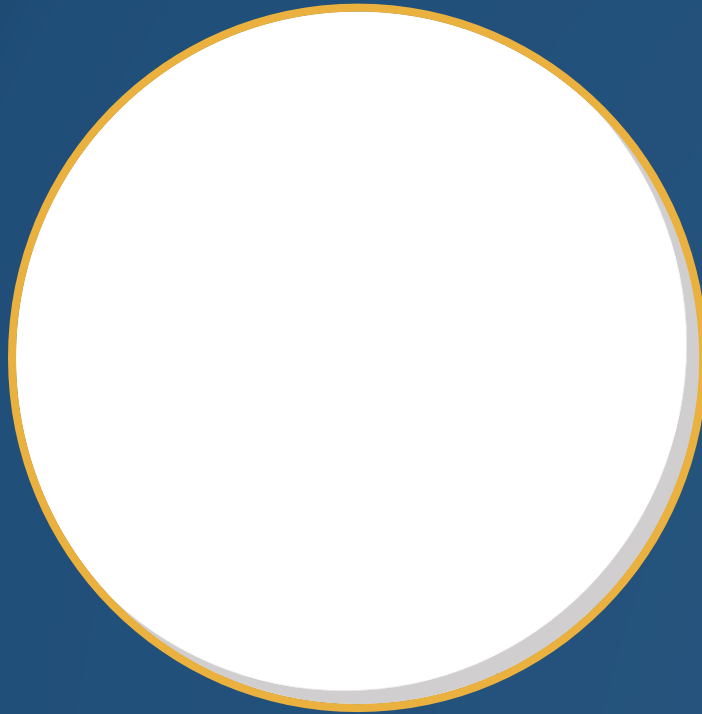
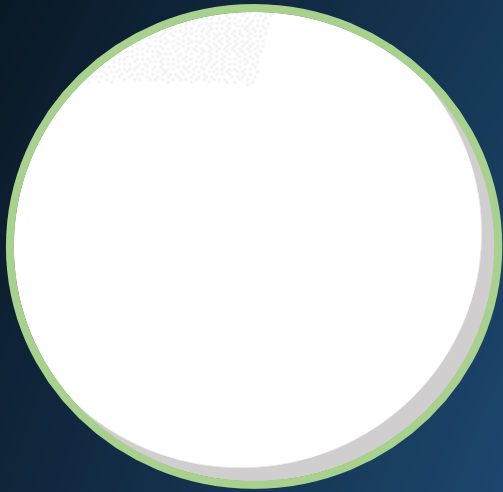
biostasticalWebApplicationsRProcedures

inside the Roche Diagnostics Galaxy

Sebastian Wolf – July 17th 2019



What is the Roche Diagnostics Galaxy?



What is the Roche Diagnostics Galaxy?



collect blood



measure blood parameters with a
Roche Diagnostics device



your doctor makes a decision
based on the measurements

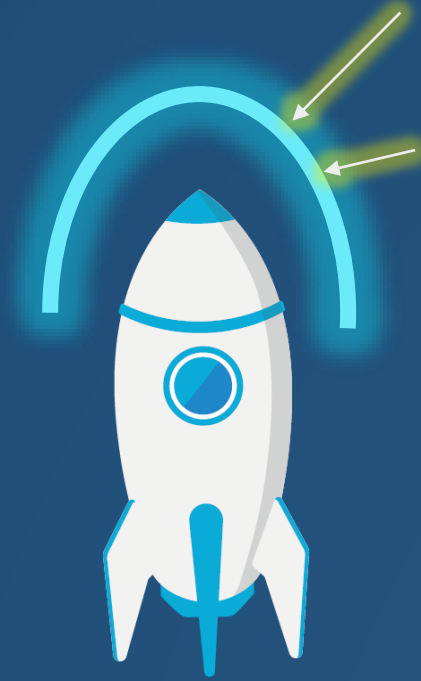
Mathematical correctness is ensured by multiple planets (institutions)



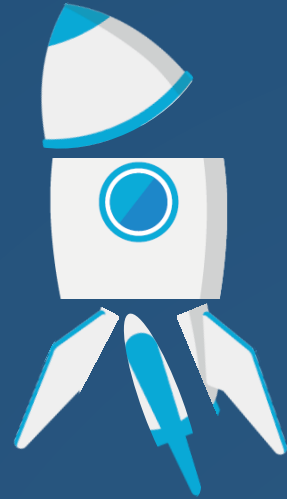
SPACE SHIP REQUIREMENTS



SPEED



ROBUSTNESS



CONSTRUCTION

SPEED



SPEED

CLSI
Guideline

FDA

Biostats

SOP

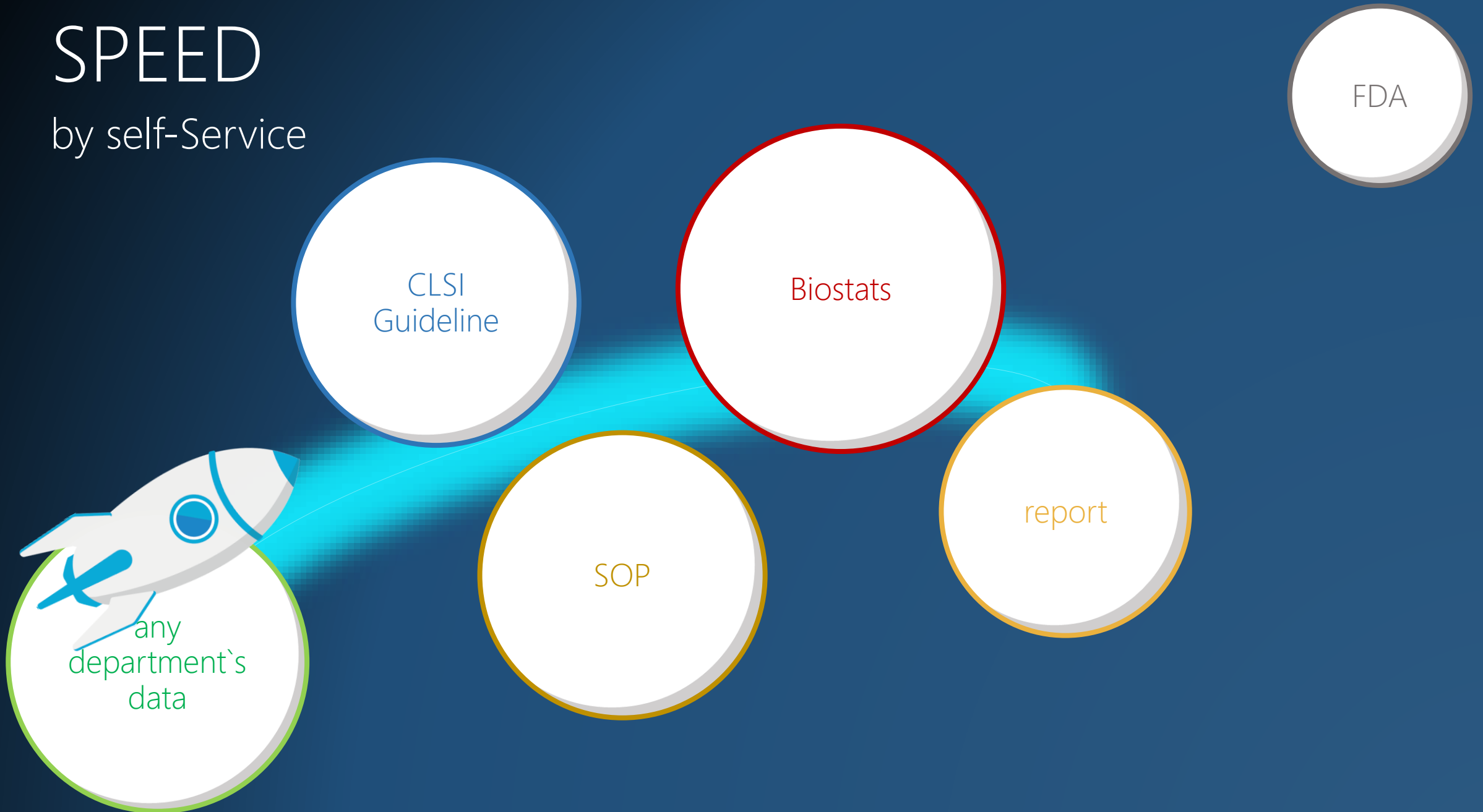
report

any
department's
data



SPEED

by self-Service



SPEED

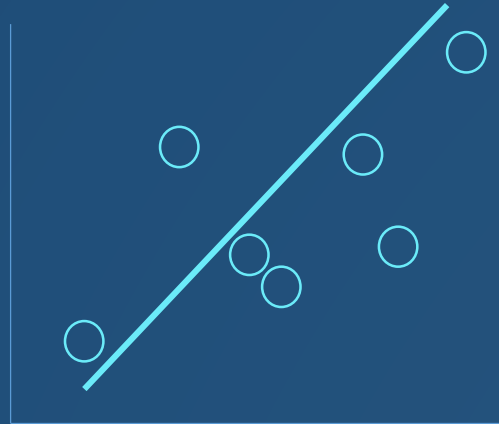
- Simplistic User-interface
- Reproducible analysis – Run your analysis again
- PDF generation
- Help Pages

SPEED

Measurements
with different
reagents



Linear Regression



Regression
Coefficients



SPEED

Demo

Report

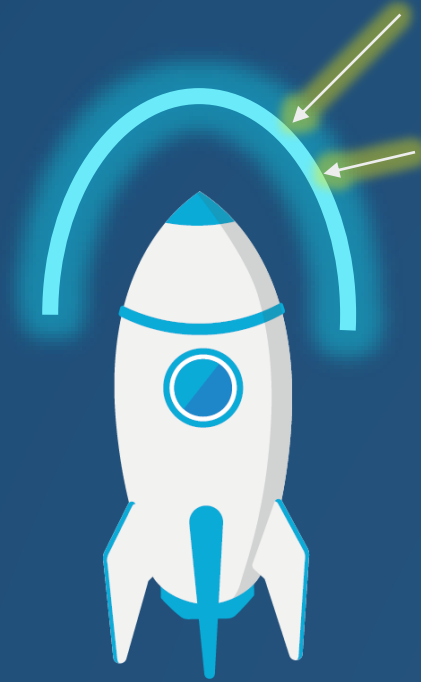


Data

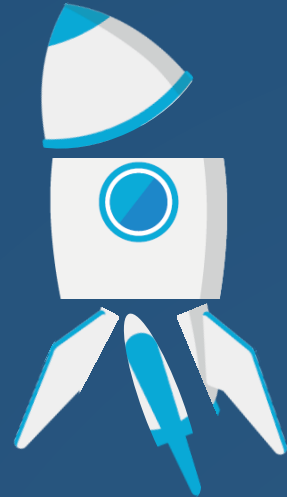
SPACE SHIP REQUIREMENTS



SPEED



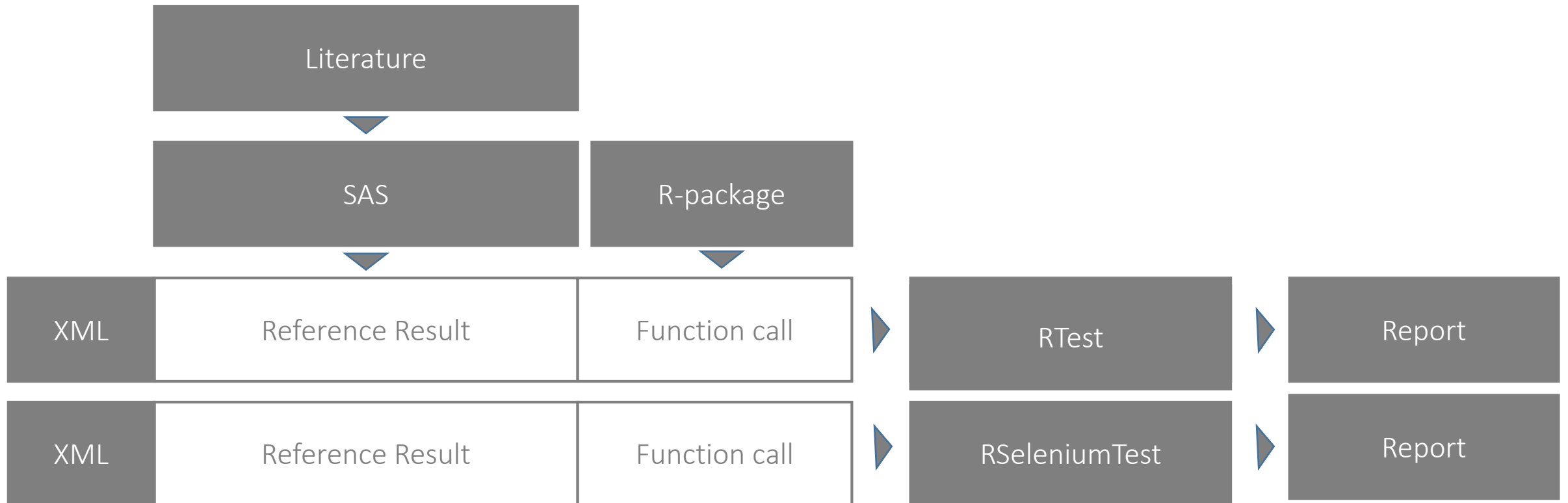
ROBUSTNESS



CONSTRUCTION

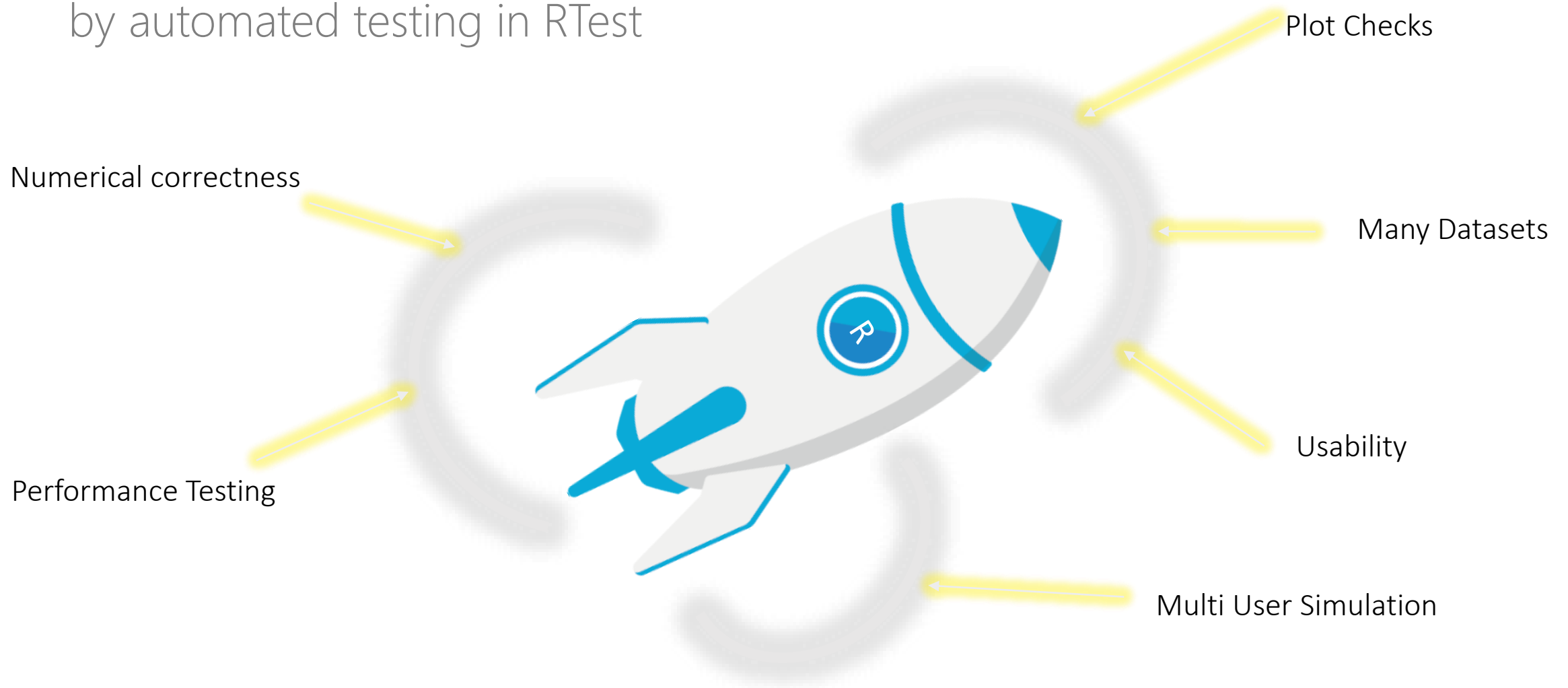
ROBUSTNESS

by automated testing with **Rtest** and **RSelenium**

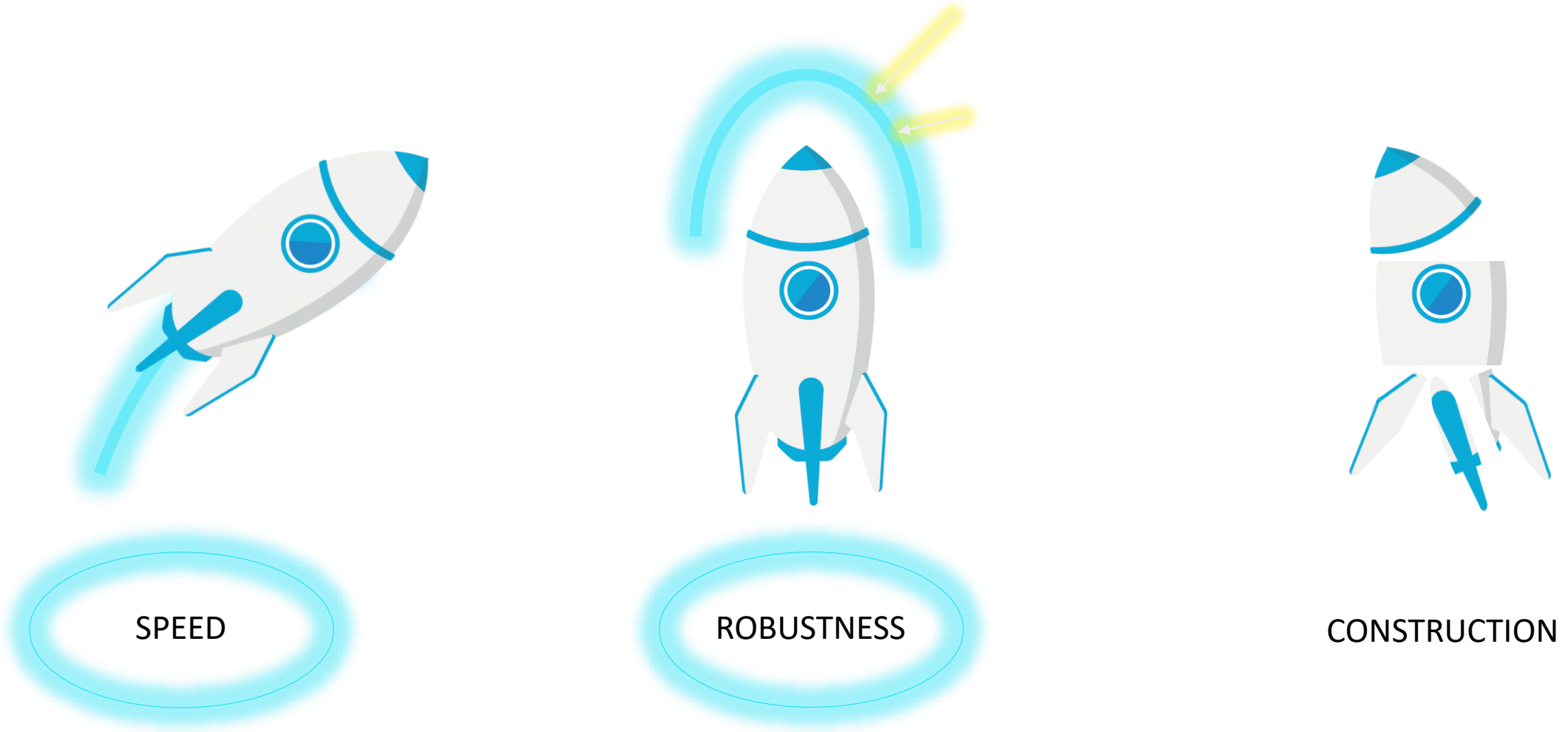


ROBUSTNESS

by automated testing in RTest



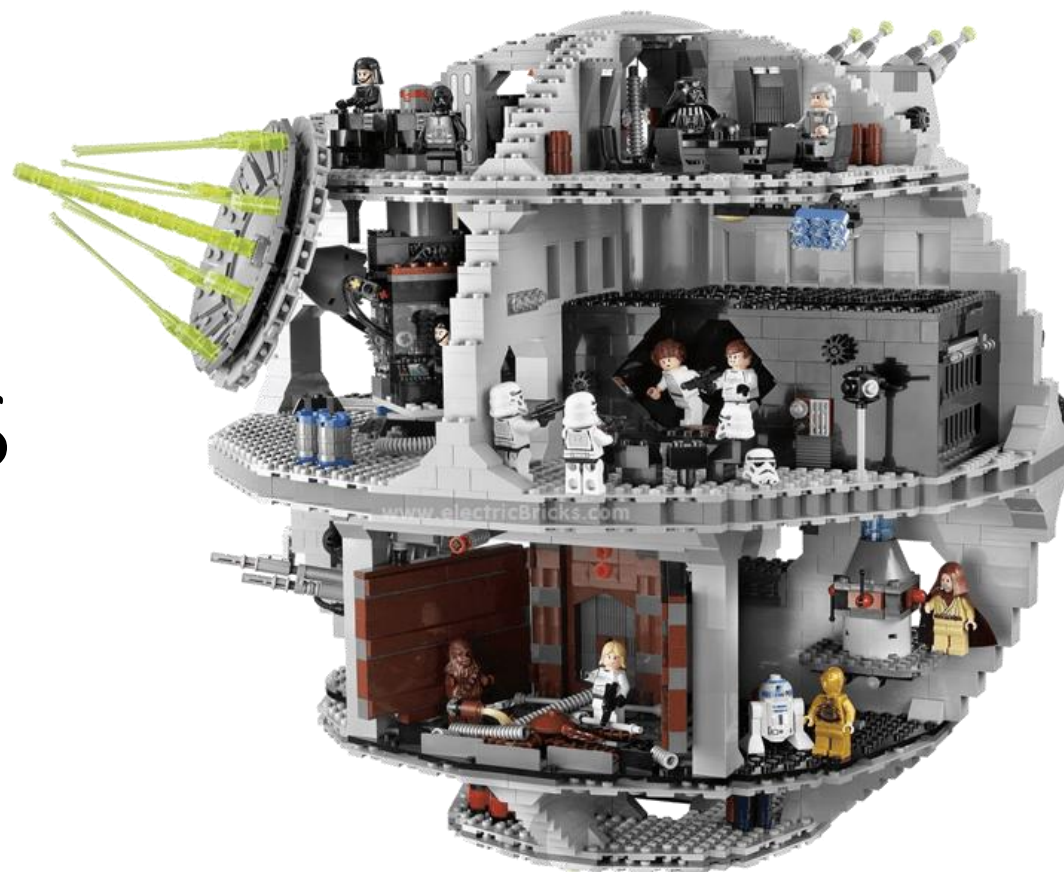
SPACE SHIP REQUIREMENTS



CONSTRUCTION



VS



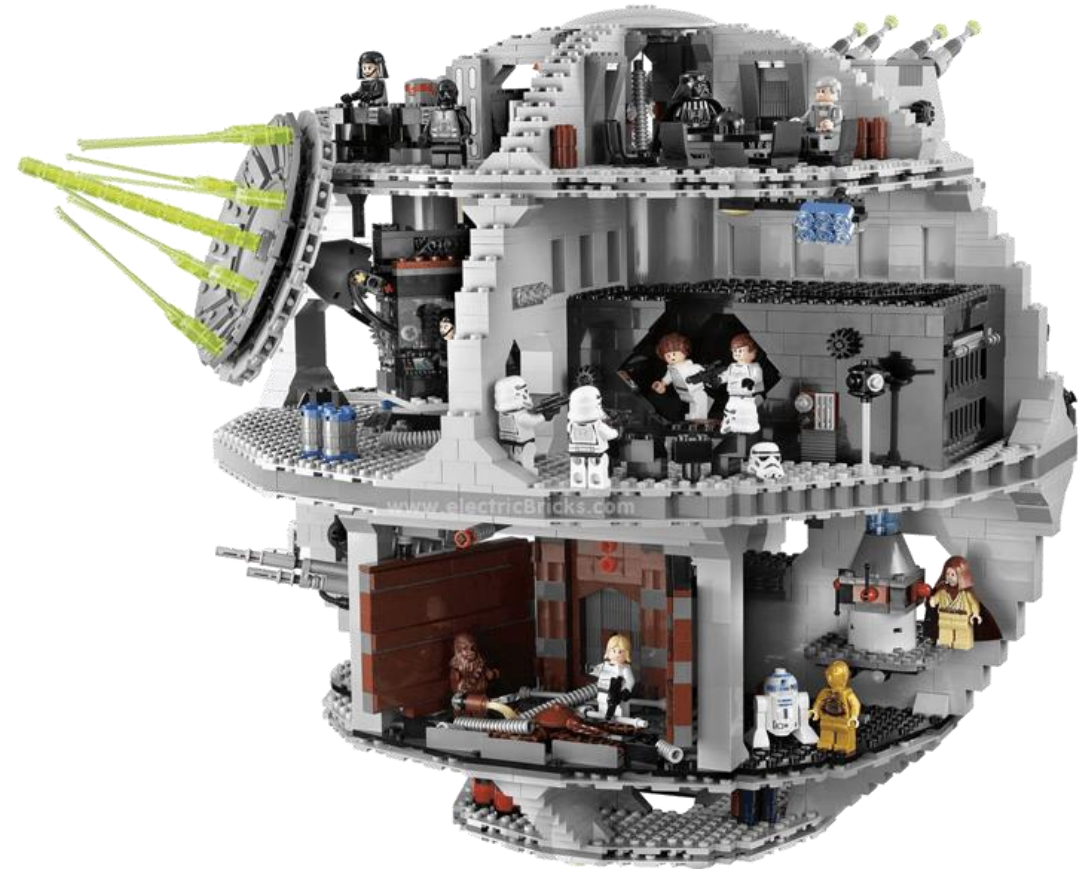
CONSTRUCTION

is LEGO like

+ Standardization

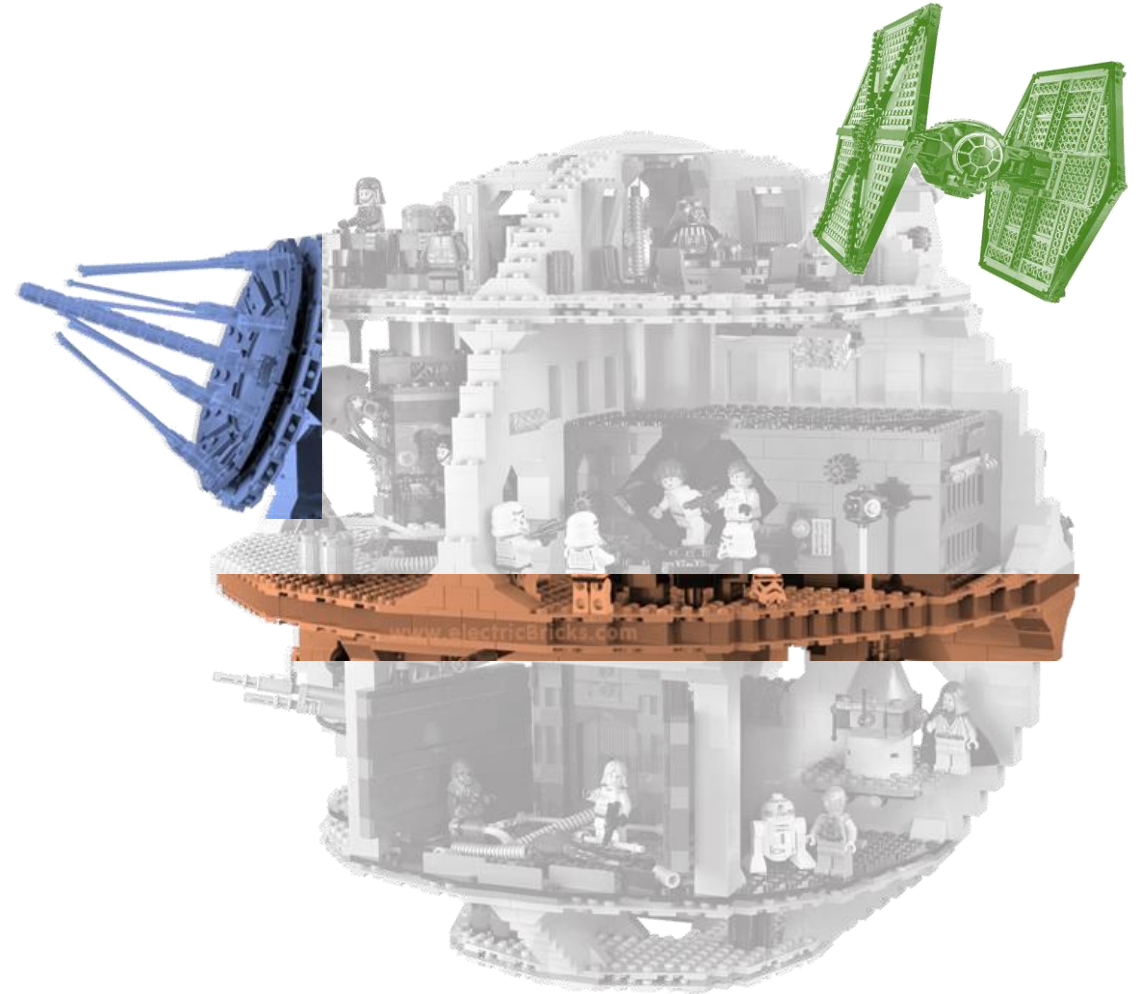
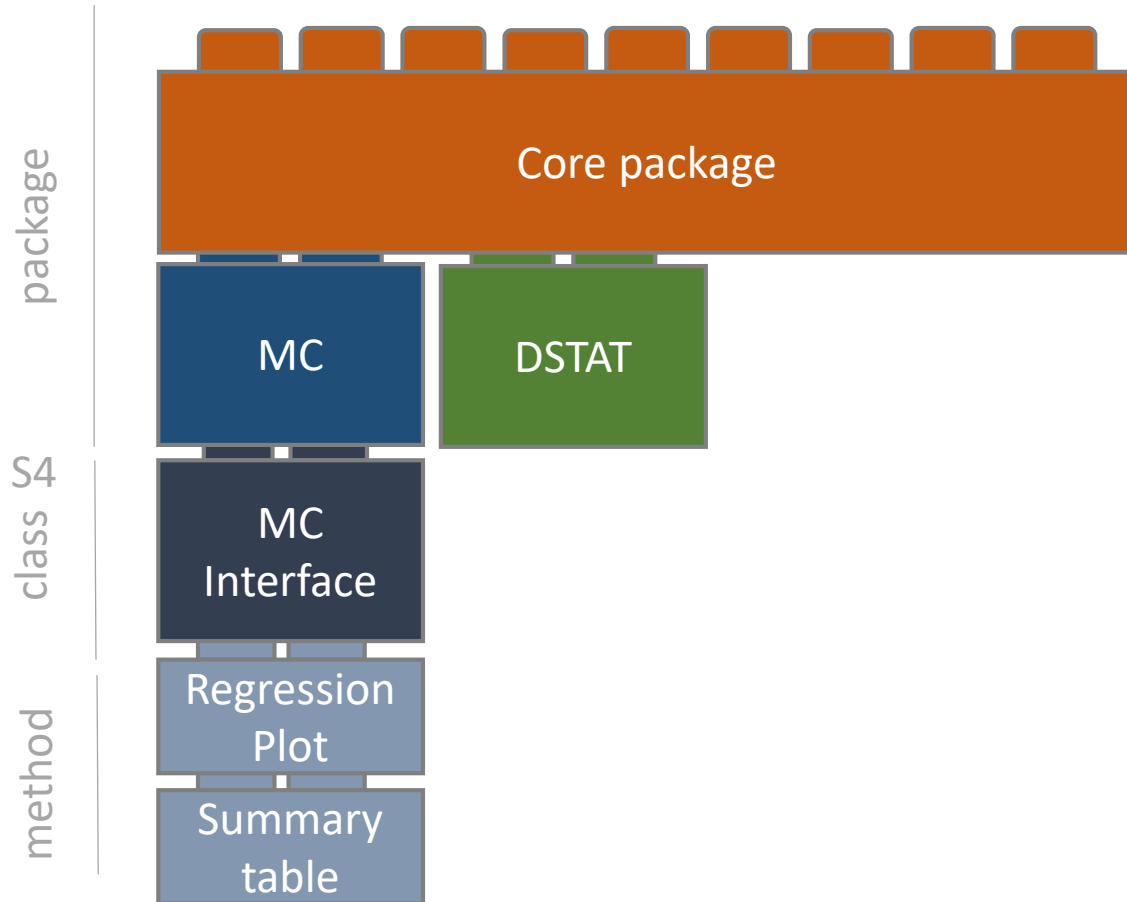
+ Modularization

- Specialization



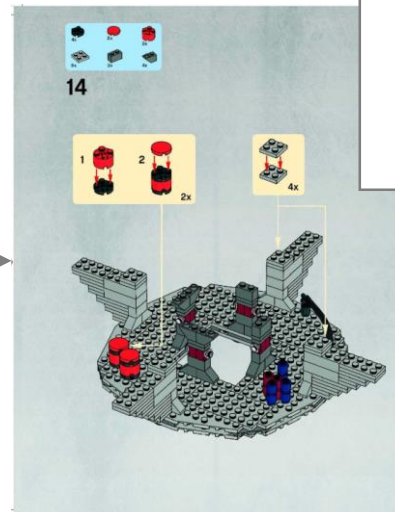
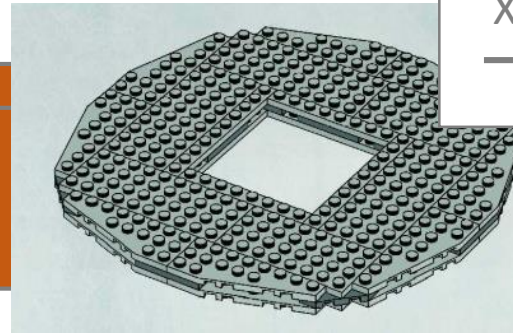
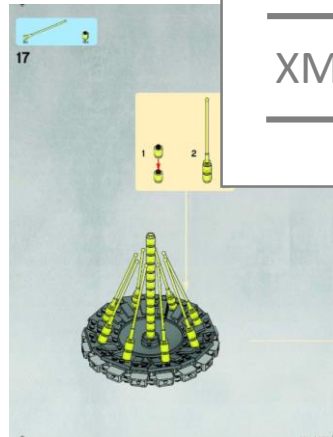
CONSTRUCTION

is LEGO like

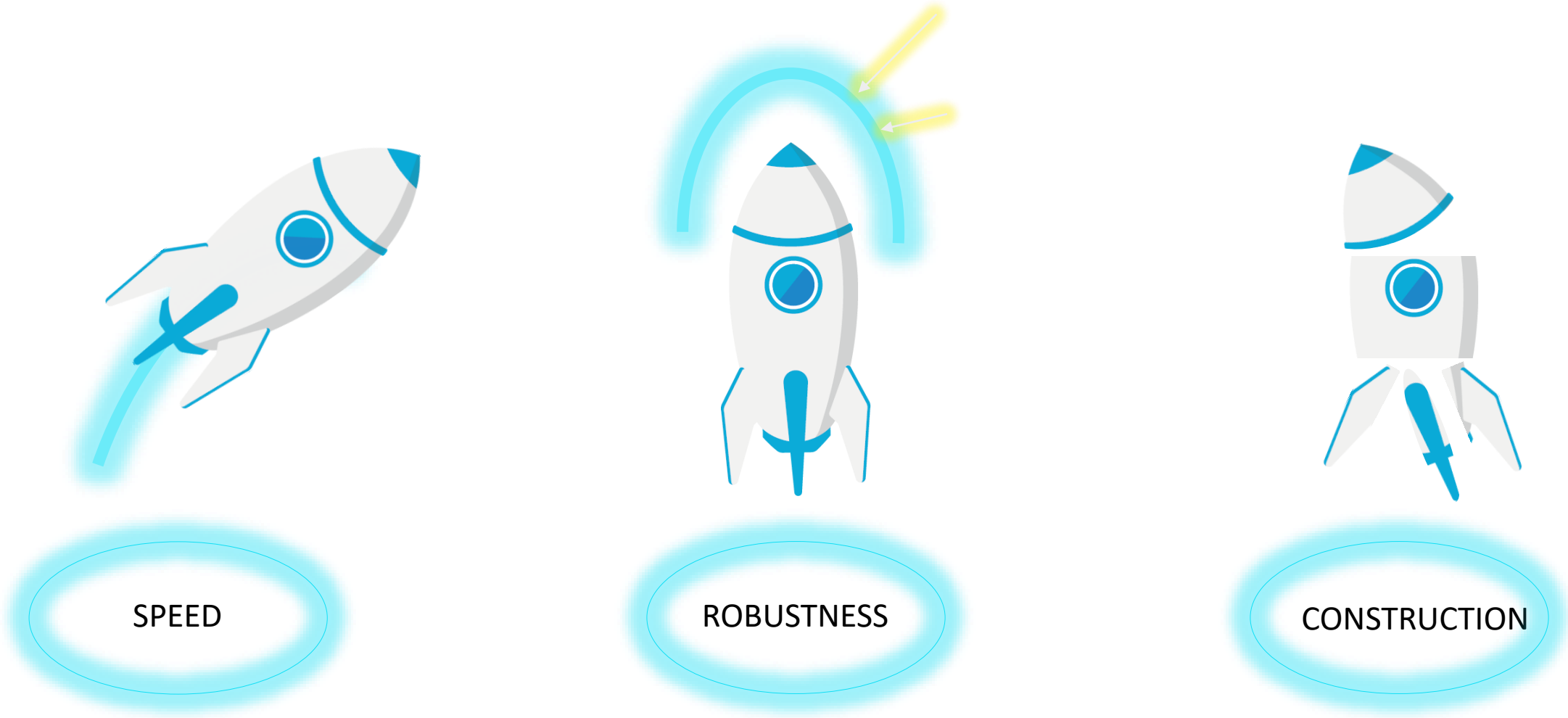


CONSTRUCTION

XML construction plans



SPACE SHIP REQUIREMENTS



SPACE SHIP REQUIREMENTS

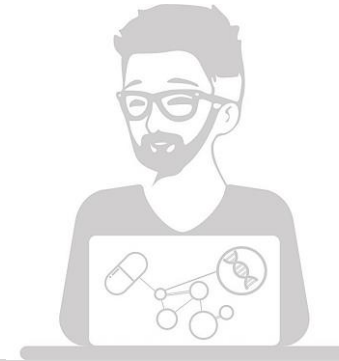


THANK YOU

and may the force be with you



```
#' Roche Diagnostics
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```



```
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#' @cv           linkedin.com/in/zappingseb
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