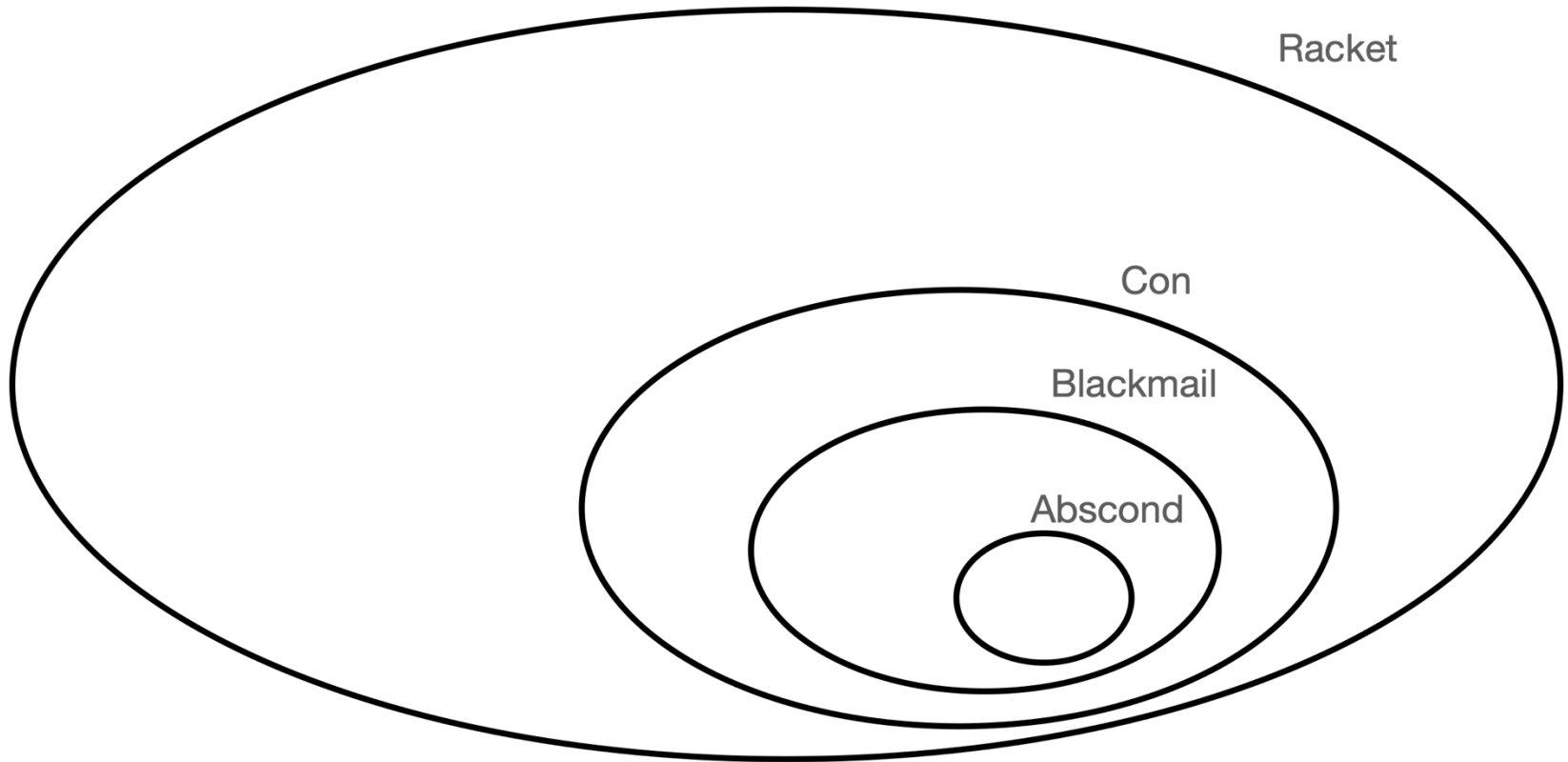


CMSC 430: Introduction to Compilers

abscond

Language Subsets



Abscond Compiler

- ▶ Reader : Input \rightarrow S-Expr
- ▶ Parser: S-Expr \rightarrow Expr
- ▶ **Compiler: Expr \rightarrow a86**
- ▶ Assembler: a86 \rightarrow Object
- ▶ Linker: Object \rightarrow Executable

- ▶ Runtime system: C code linked together w/ program object code

abscond

- ▶ Simple programming language. The only kind of expression in Abscond are integer literals. Running an abscond program just produces that integer.

- ▶ Grammar:
$$e ::= integer$$

- ▶ AST:
$$\begin{aligned} e &::= (\text{Lit } i) \\ i &::= integer \end{aligned}$$

- ▶ Operational Semantics:
$$\overline{A[(\text{Lit } i), i]}$$

Abscond: components

