

# Foundations - type theory

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## 1 Deductive system

### 1.1 Contexts

**Definition 0.1.** We will note  $\epsilon$  for the empty context

**Axiom 0.1.** empty derivation :  $rule\_empty\_derivation : \epsilon \longrightarrow empty\ context\ ctx$

**Axiom 0.2.** context extension :  $rule\_context\_extension : context\_gamma \vdash var\_A : Type\_i \longrightarrow context\_gamma \vdash var\_A\ ctx, var\_x\ not\ in\ dom(context\_gamma)$