Naming convention based on The Elements of MATLAB Style [EMS]

| type | Purpose | Convention | Example | Reference in EMS |
|----------------------------|------------------------------------|--|-------------------------------------|---|
| variables & parameters | General variable names | lowerCamelCase | lengthSpring; stepSize; delta | Chapter 3: 41, 42. |
| | number of items | start with n | nFiles; nNodes; nElements | Chapter 3: 46. |
| | iteration counter | start with i, j (usually i for row and j for column index) | iElement; jNode | Chapter 3: 45, 50. |
| | current variable in a loop | prefix this | thisElement = elements(iElement) | Chapter 3: 48. |
| Constants | Constant Names with Local Scope | Uppercase, underscore separator | MAX_ITERATIONS | Chapter 3: 59-63. |
| | | Lowercase names can be used in domain-specific applications if the most common representation of the constant is in lowercase. | c for the speed of light | |
| Structures and cell arrays | Struct name | UpperCamelCase | Setup; ElementsTable | Chapter 3: 64. |
| | field name in a struct | use naming convention for variables, unless the field is itself a struct | Setup.ElementsTable(iElement).nodes | Chapter 3: 65, 66 |
| | cell array | use naming convention for variables | greeting{1} = 'hello' | Chapter 3: 67. |
| functions and methods | user-defined | lowercase, underscore separated | average(); compute_equilibrium(); | This is against the suggested convention EMS, but we would like keep this to improve readability and avoid confusion with |
| | boolean function | use prefix is, has, can etc. | is_updated(); has_license(); | variable names |
| Classes | Class Name | UpperCamelCase | Robert = AccountManager(); | Chapter 3: 78. |
| | properties | use naming convention for variables, unless the field is itself a class or struct object | Robert.salary = 'sufficient'; | Chapter 3: 81. |
| | methods | use naming convention for functions | Rober.update_salary(); | |