

# DESIGN ARTIFACTS

Software for parallelization of high  
energy physics code related to  
dark matter simulation

2015

**Authors –**

**Ketan Chaware**

**Vishwajeet Singh Thakur**

**Prateek Gupta**

\*\*

# ***CONTENTS***

\*\*

0	TRACEABILITY MATRIX.....	2
1	CONTEXT MODEL.....	3
2	INTERACTION MODEL.....	4
3	STRUCTURAL MODEL.....	5
4	BEHAVIORAL MODEL.....	6
4.1	DATA DRIVEN MODEL.....	6
4.2	EVENT DRIVEN MODEL.....	9

# TRACEABILITY MATRIX

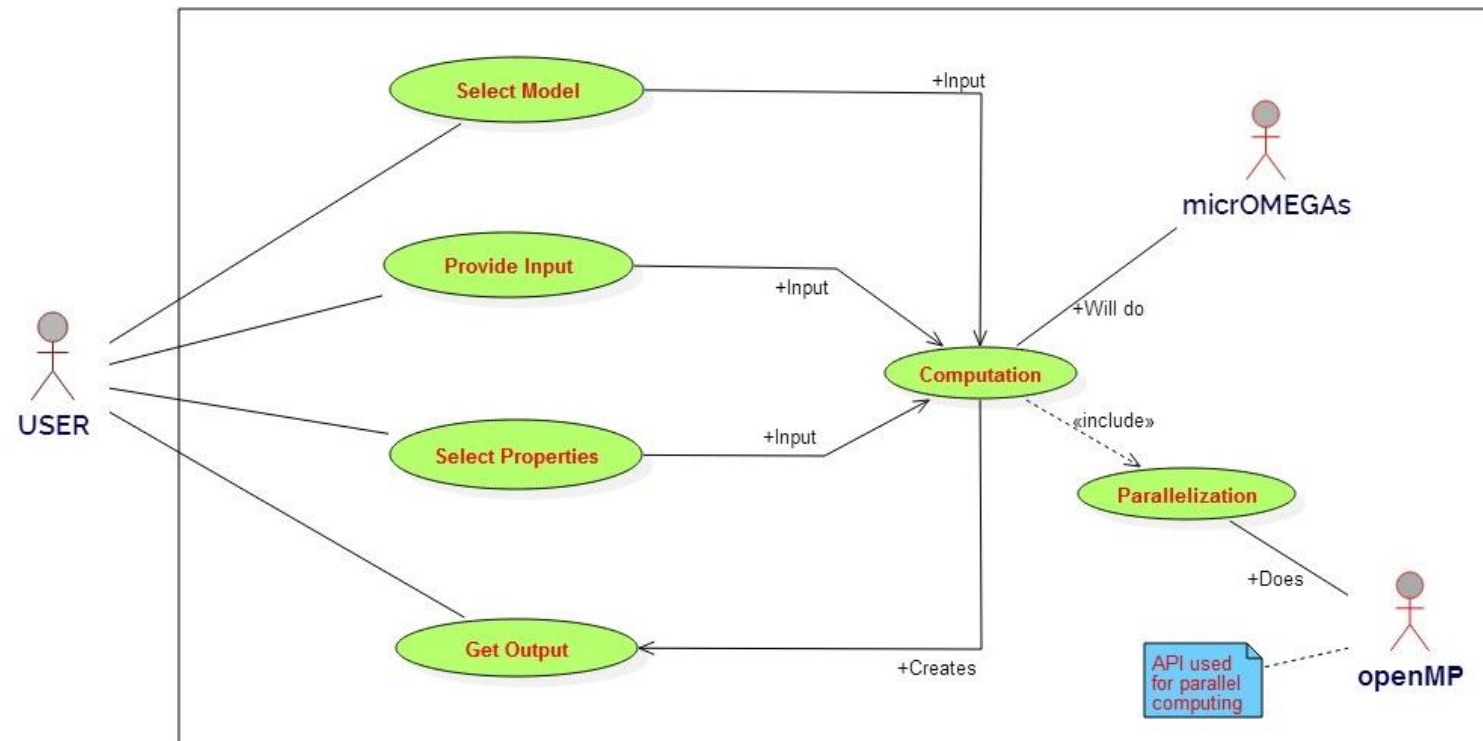
Sections of SRS Sections of Design artifacts	2.1	3.1	3.2
1	✓	✓	
2		✓	✓
3			✓
4.A		✓	✓
4.B		✓	✓

# 1. CONTEXT MODEL

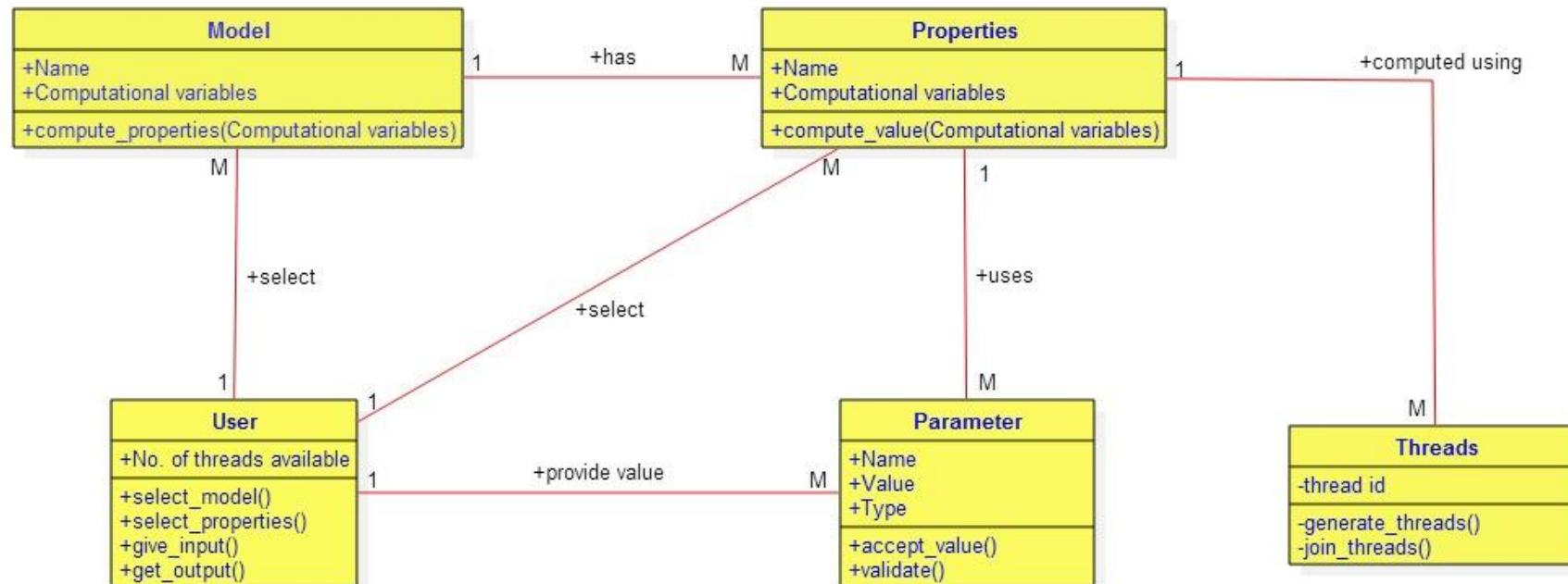
Our product will run on stand-alone P.C. There will be no interaction with any other external system or network.



## 2. INTERACTION MODEL



### 3. STRUCTURAL MODEL

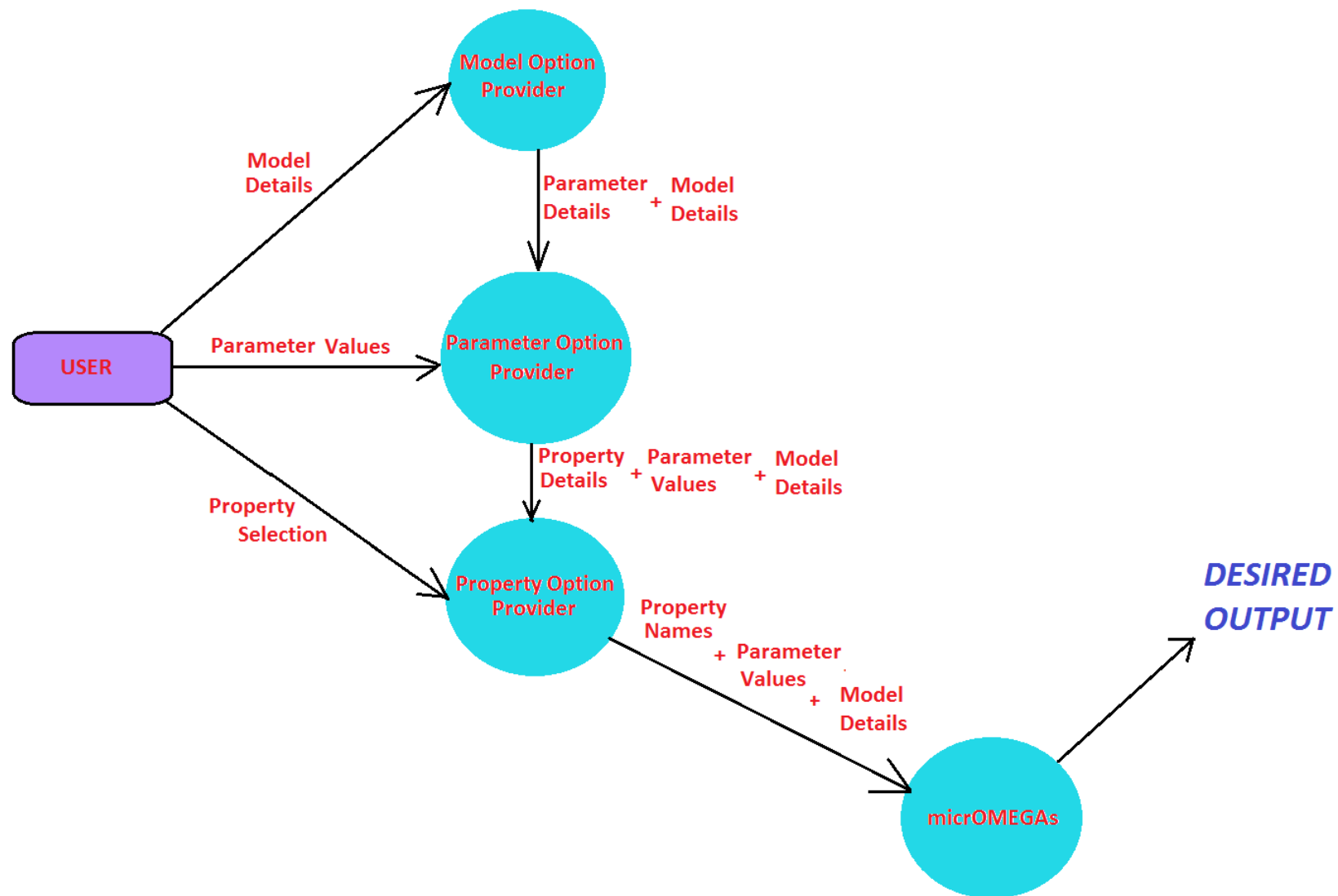


## 4. BEHAVIORAL MODEL

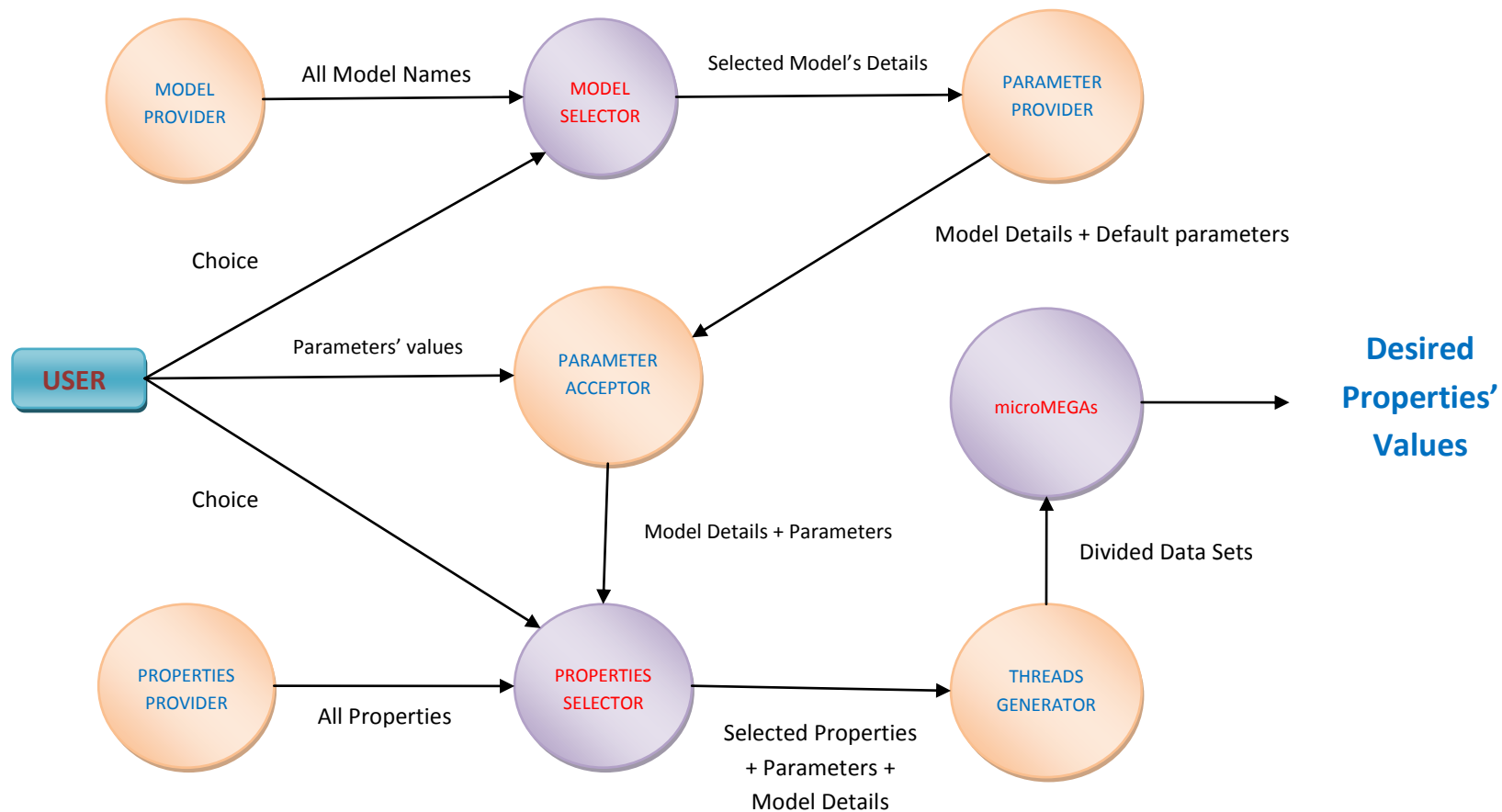
### A) DATA DRIVEN MODEL

i) 0<sup>th</sup> level data flow diagram



ii) 1<sup>st</sup> level data flow diagram



iii) 2<sup>nd</sup> level data flow diagram

## B) EVENT DRIVEN MODEL

