

# Software Engineering Assignment 1

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## Task 1

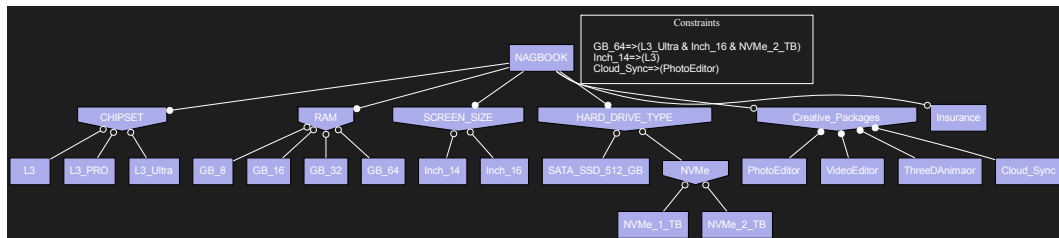


Figure 1: Nagbook Laptop Models Feature Diagram

## Task 2

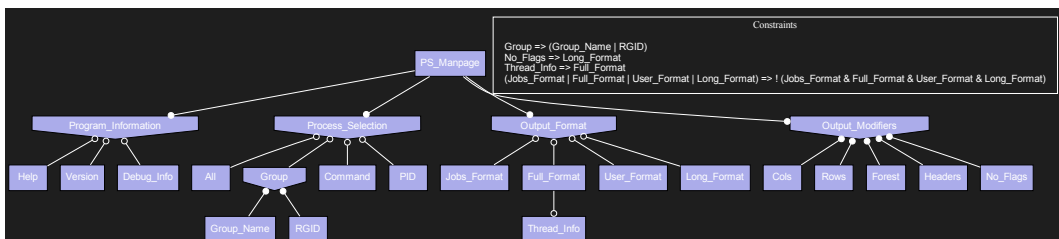


Figure 2: Feature Model of the PS ManPage

### Task 3

$$\begin{aligned} \llbracket fn \rrbracket = & TAR \\ & \wedge (Opmode \Leftrightarrow TAR) \wedge ((Create \vee Delete) \Leftrightarrow OPmode) \wedge (Touch \Rightarrow Extract)) \\ & \wedge (Format \Leftrightarrow TAR) \wedge ((GNU \vee Posix) \Leftrightarrow Format) \wedge \neg(GNU \wedge Posix) \\ & \wedge (Archive \Leftarrow TAR) \\ & \wedge (File \Rightarrow TAR) \\ & \wedge (Options \Leftrightarrow TAR) \wedge ((Interactive \vee Ownwe \vee RemoveFiles) \Leftrightarrow Options) \end{aligned}$$

### Task 4

$$\begin{aligned} fn = & \star \langle \langle \wedge \langle \langle Burger, \\ & \bullet \langle \langle Burger, Bun \rangle \rangle \\ & \bullet \langle \langle Burger \triangle \langle \langle Patty, Vegan, Chicken, Beef \circ Wagyu \rangle \rangle \rangle \\ & \bullet \langle \langle Burger \triangle \langle \langle Sauce, Ketchup, Mayo, ChiliSalsa \rangle \rangle \rangle \\ & \bullet \langle \langle Burger, \blacktriangle \langle \langle Veggies, Pickels, Lettuce, Chilli \triangle \langle \langle Chilli \triangle \langle \langle Habanero, Jalapeno \rangle \rangle \rangle \rangle \rangle \\ & \circ \langle \langle Burger, \blacktriangle \langle \langle Addons, FriedOnion, Eggs, Bacon \rangle \rangle \rangle \\ & \circ \langle \langle Burger, DoublePatty \rangle \rangle \end{aligned}$$