Deadline for CH310N HW 6, Due: Oct 31 3:00 PM

Reactions: Each of the following compounds can be synthesized by two-step reactions. Indicate the reagents required for the reactions, the intermediate compound. Your pathway must address any regiochemistry in the products.
Mechanism: Provide the stepwise mechanism for the following Friedel-Crafts alkylation. Show all important flows of electrons, charges and intermediates. Follow the instructions for each of the stages.

Show the generation of the electrophile:

Show the carbon-carbon bond formation (the rate determining step):

Draw the family of resonance structures:

Show the last step—the loss of the proton: