Sample Logic Puzzle in Prolog

I. Puzzle Description:

Code the following puzzle in Prolog, so we can determine the answer for each person. You are NOT supposed to figure this out by hand and just code the solution in Prolog!!!

Elliot and four friends were amateur astronomers and often spent nights together observing the stars through their telescopes. Recently, they'd discovered a new way to enjoy their passion – not just observing the heavens but also photographing them. Using laptops and digital cameras connected to the telescopes, they scanned the sky for astronomical phenomena to photograph. On Friday night, the five friends met for the evening to view the stars. It was a beautiful night for astronomy. Weather conditions were perfect for viewing, the sky clear and brilliant with stars; even the temperature was pleasant, warm but comfortable. As a result, some of them stayed out quite late and all shot some great photos. Each had two photos in particular that were just fantastic images. By happy coincidence, each happened to be shooting something different when those photos were taken so by the end of the night, they had a phenomenal collection of images to show off (each managed to capture a different planet and a different nebula). Determine the full name of each amateur astronomer, the time each packed up for the night (between midnight and 4am), and the planet and nebula each captured with a fantastic image.

1. Mr. Masters got a terrific picture of the Ring Nebula. Felix didn't get a picture of the Orion Nebula.

2. Nick Spade didn't get a picture of the Crab Nebula but he left two hours later than the one who got a picture of Saturn.

3. Janet, whose last name wasn't West, left two hours after the one who photographed Jupiter.

4. The friend who took a picture of Venus also got a picture of the Cat's Eye Nebula. Ms. Carter got a picture of the Omega Nebula.

5. The five amateur astronomers were Elliot, the one who photographed Neptune, the one who left at 2am, Ms. Packet, and the one who photographed the Omega Nebula.

6. Felix left at 4am but he didn't get a photograph of Mars. Sheila's last name wasn't Packet and she didn't leave at 3am. The friend who got a picture of the Orion Nebula left at 1am.

The PROLOG solution code is in a3.pl