Ex6: Joint probabilistic world model

Idea

- Agents might have heat sensor
- Measuring thermal + sigma
- Collect multiple measurements from the same Civilian
- Fuse them in the center to get better (global) estimate

Updated Code

```
public class ExplorationCivilian {
	enum SENSE_STATE {
		SS_UNKNOWN,
		SS_TRUE,
		SS_FALSE,
	};

	Civilian civilian;

	SENSE_STATE thermal;
	SENSE_STATE sound;
	SENSE_STATE motion;
	SENSE_STATE co2;
	int lastSeenTime;
	double thermalValue, thermalSigma;
…
```

World model (1)

- lastSeen should not be old
- Agent should have a heat sensor (sense state should not be SS_UNKNOWN)
- Send thermal+sigma to Center

World Model (2)

- Collect all thermal + sigma for each Civilian
- If measurement received and Civilian is already known: Fuse the two Gaussians
- Output each round the current estimates
- Testing: Make sure you have multiple observations by changing agent‘s behavior