plotTrajectories

This function plots two input trajectories with specific formatting based on the input angle number and the input control method.

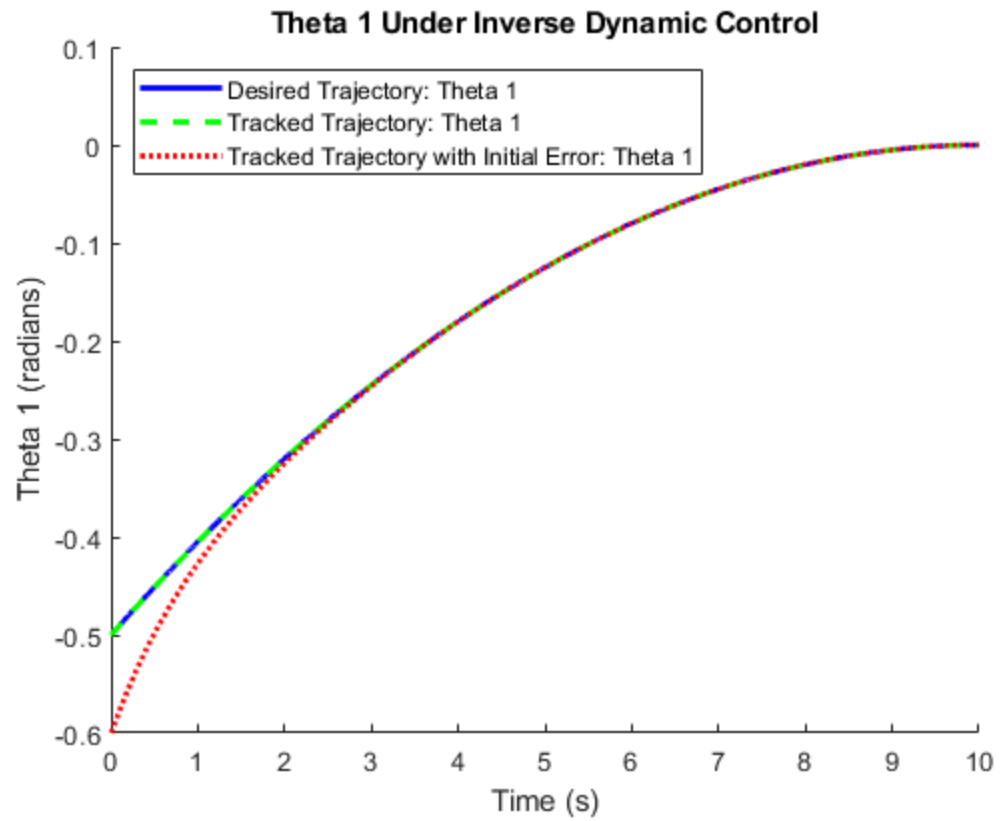```matlab
function plotTrajectories(theta, control, time, trajectory, T, X,
 T_error, X_error)
```

Creates name of the plot:

```matlab
name = sprintf('Theta %d Under %s Control', theta, control);
```

Creates the figure:

```matlab
figure('Name',name);
hold on
% Plot the trajectories:
plot(time, trajectory, ...
    'b', ...
    'LineWidth', 2, ...
    'DisplayName', sprintf('Desired Trajectory: Theta %d', theta));
plot(T, X, ...
    'g--', ...
    'LineWidth', 2, ...
    'DisplayName', sprintf('Tracked Trajectory: Theta %d', theta));
plot(T_error, X_error, ...
    'r:', ...
    'LineWidth', 2, ...
    'DisplayName', sprintf('Tracked Trajectory with Initial Error:
 Theta %d', theta));
% Sets lables:
title(name);
xlabel('Time (s)');
ylabel(sprintf('Theta %d (radians)', theta));
legend('location', 'northwest');
```

Theta 1 Under Inverse Dynamic Control

```
end
```

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