Initialize Fields to Zero
$$\vec{E} = \vec{H} = 0$$

Done

Yes

Finished

No

Update H from E
$$\left.\vec{H}\right|_{t+\triangle t/2} = \left.\vec{H}\right|_{t-\triangle t/2} - \frac{\triangle t}{\mu}(\nabla \times \left.\vec{E}\right|_{t})$$

Update E from H
$$\left.\vec{E}\right|_{t+\triangle t/2} = \left.\vec{E}\right|_{t-\triangle t/2} - \frac{\triangle t}{\epsilon}(\nabla \times \left.\vec{H}\right|_{t})$$

Figure 1: Block diagram describing a simple FDTD Algorithm