Detecting Model Changes

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Module Outline

How Entity Framework tracks changes
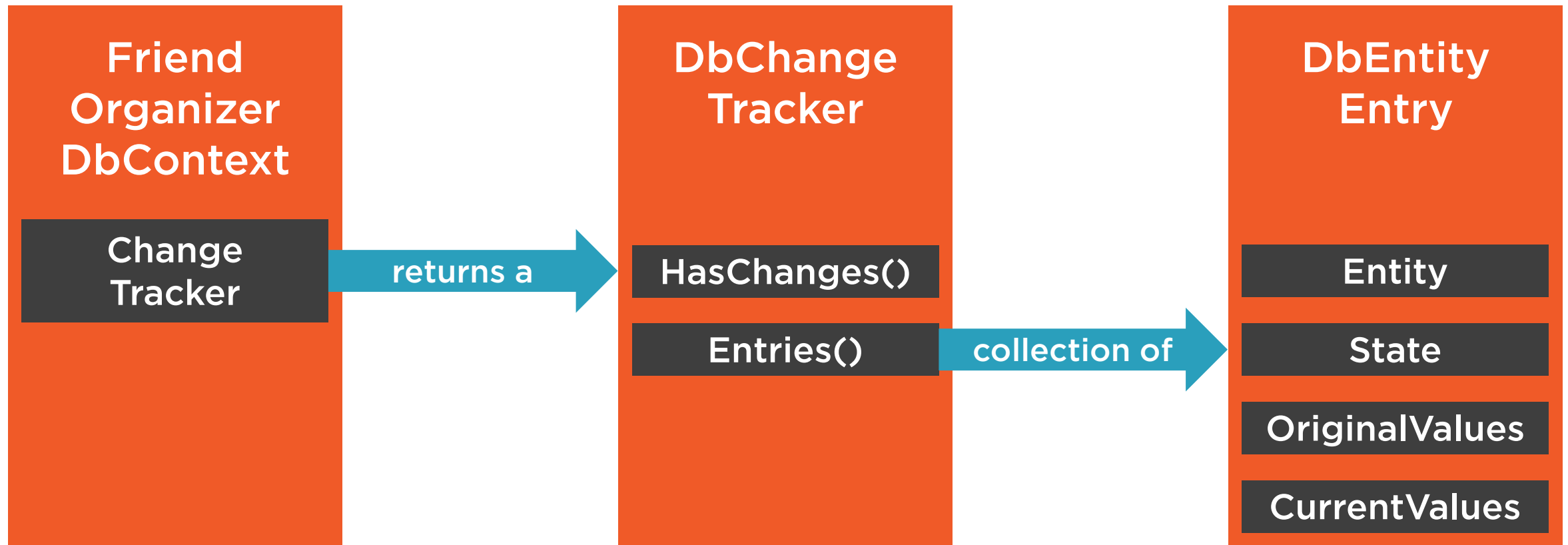
Plan the lifetime of the DbContext

Create and use a FriendRepository

Enable and disable the save button

Block navigation from a changed friend
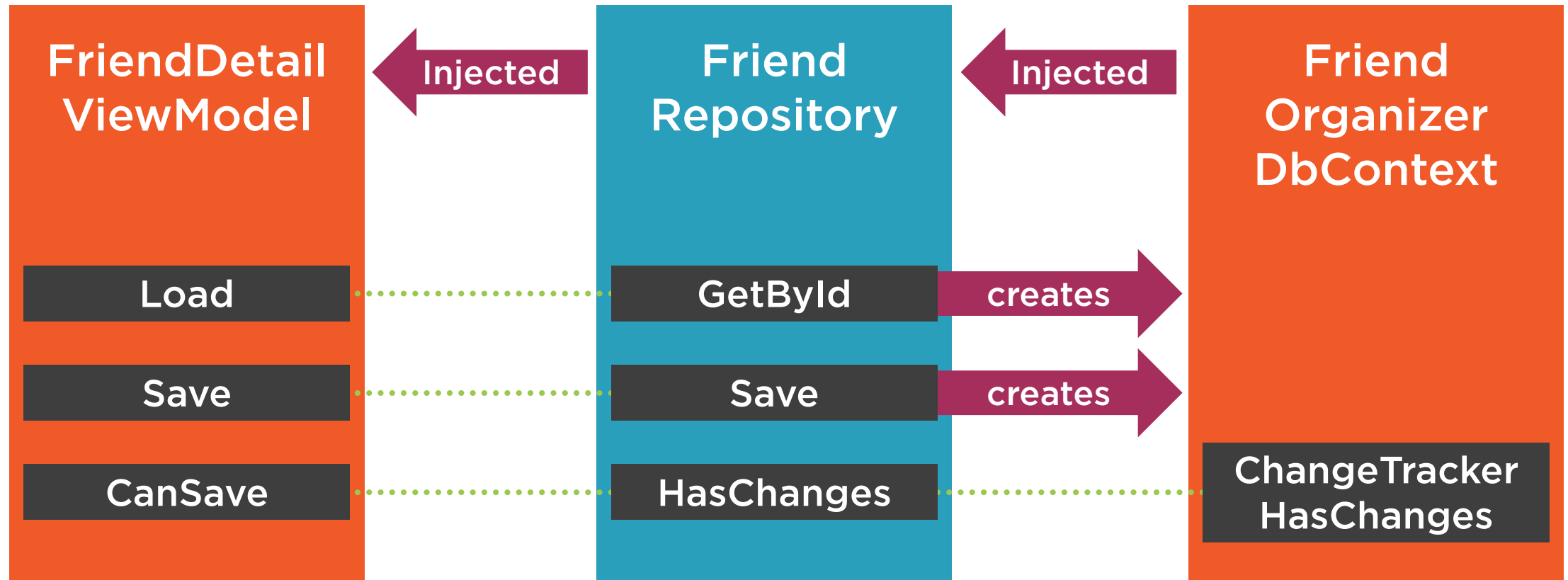
How Entity Framework Tracks Changes

Friend Organizer DbContext

Change Tracker

returns a →

DbChange Tracker

HasChanges()

Entries()

collection of →

DbEntity Entry

Entity

State

OriginalValues

CurrentValues

How Entity Framework Tracks Changes

```csharp
public async Task SaveAsync(Friend friend)
{
  using (var ctx = _contextCreator())
  {
    ctx.Friends.Attach(friend);
    ctx.Entry(friend).State = EntityState.Modified;
    await ctx.SaveChangesAsync();
  }
}
```

Plan the DbContext Lifetime

Demo

Create the FriendRepository

Use a single FriendRepository per detail view

Demo

Add an HasChanges method
to the repository

Enable and disable the save button

Demo

Block navigation from a changed friend

Create a MessageDialogService

Demo

Remove selection in the navigation

Style the navigation

Summary

How Entity Framework tracks changes

Use a DbContext instance per detail view
- DbContext is encapsulated in FriendRepository

Enable and disable the save button

Block navigation from a changed friend