## 3장 완성 코드

### templates/articles/new.mustache

{{>layouts/header}}  
  
<form class="container" action="/articles/create" method="post">  
 <div class="mb-3">  
 <label class="form-label">제목</label>  
 <input type="text" class="form-control" name="title">  
 </div>  
 <div class="mb-3">  
 <label class="form-label">내용</label>  
 <textarea class="form-control" rows="3" name="content"></textarea>  
 </div>  
 <button type="submit" class="btn btn-primary">Submit</button>  
</form>  
  
{{>layouts/footer}}

### controller/ArticleController.java

**package** com.example.firstproject.controller;  
  
**import** com.example.firstproject.dto.ArticleForm;  
**import** com.example.firstproject.entity.Article;  
**import** com.example.firstproject.repository.ArticleRepository;  
**import** org.springframework.beans.factory.annotation.Autowired;  
**import** org.springframework.stereotype.Controller;  
**import** org.springframework.web.bind.annotation.GetMapping;  
**import** org.springframework.web.bind.annotation.PostMapping;  
  
@Controller  
**public class** ArticleController {  
 @Autowired  
 **private** ArticleRepository **articleRepository**;  
  
 @GetMapping(**"/articles/new"**)  
 **public** String newArticleForm() {  
 **return "articles/new"**;  
 }  
  
 @PostMapping(**"/articles/create"**)  
 **public** String createArticle(ArticleForm form) {  
 System.***out***.println(form.toString());  
  
 *// 1. DTO를 엔티티로 변환* Article article = form.toEntity();  
 System.***out***.println(article.toString());  
  
 *// 2. 리파지터리로 엔티티를 DB에 저장* Article saved = **articleRepository**.save(article);  
 System.***out***.println(saved.toString());  
  
 **return ""**;  
 }  
}

### dto/ArticleForm.java

**package** com.example.firstproject.dto;  
  
**import** com.example.firstproject.entity.Article;  
  
**public class** ArticleForm {  
 **private** String **title**; *// 제목을 받을 필드* **private** String **content**; *// 내용을 받을 필드* **public** ArticleForm(String title, String content) {  
 **this**.**title** = title;  
 **this**.**content** = content;  
 }  
  
 @Override   
 **public** String toString() {  
 **return "ArticleForm{"** +  
 **"title='"** + **title** + **'\''** +  
 **", content='"** + **content** + **'\''** +  
 **'}'**;  
 }  
  
 **public** Article toEntity() {  
 **return new** Article(**null**, **title**, **content**);  
 }  
}

### entity/Article.java

**package** com.example.firstproject.entity;  
  
**import** jakarta.persistence.Column;  
**import** jakarta.persistence.Entity;  
**import** jakarta.persistence.GeneratedValue;  
**import** jakarta.persistence.Id;  
  
@Entity  
**public class** Article {  
 @Id  
 @GeneratedValue  
 **private** Long **id**;  
  
 @Column  
 **private** String **title**;  
  
 @Column  
 **private** String **content**;  
  
 *// Article 생성자 추가* **public** Article(Long id, String title, String content) {  
 **this**.**id** = id;  
 **this**.**title** = title;  
 **this**.**content** = content;  
 }  
  
 *// toString() 메서드 추가* @Override  
 **public** String toString() {  
 **return "Article{"** +  
 **"id="** + **id** +  
 **", title='"** + **title** + **'\''** +  
 **", content='"** + **content** + **'\''** +  
 **'}'**;  
 }  
}

### repository/ArticleRepository.java

**package** com.example.firstproject.repository;  
  
**import** com.example.firstproject.entity.Article;  
**import** org.springframework.data.repository.CrudRepository;  
  
**public interface** ArticleRepository **extends** CrudRepository<Article, Long> {  
}

### resources/application.properties

server.servlet.encoding.force=true  
spring.h2.console.enabled=true

### 셀프체크 정답

#### controller/MemberController.java

**package** com.example.firstproject.controller;  
  
**import** com.example.firstproject.entity.Member;  
**import** com.example.firstproject.dto.MemberForm;  
**import** com.example.firstproject.repository.MemberRepository;  
**import** org.springframework.beans.factory.annotation.Autowired;  
**import** org.springframework.stereotype.Controller;  
**import** org.springframework.web.bind.annotation.GetMapping;  
**import** org.springframework.web.bind.annotation.PostMapping;  
  
@Controller  
**public class** MemberController {  
  
 @Autowired  
 MemberRepository **memberRepository**;  
  
 @GetMapping(**"/signup"**)  
 **public** String signUpPage() {  
 **return "members/new"**;  
 }  
  
 @PostMapping(**"/join"**)  
 **public** String join(MemberForm memberForm) {  
 System.***out***.println(memberForm.toString());  
 Member member = memberForm.toEntity();  
 System.***out***.println(member.toString());  
 Member saved = **memberRepository**.save(member);  
 System.***out***.println(saved.toString());  
 **return ""**;  
 }  
}

#### dto/MemberForm.java

**package** com.example.firstproject.dto;  
  
**import** com.example.firstproject.entity.Member;  
  
**public class** MemberForm {  
 **private** String **email**;  
 **private** String **password**;  
  
 **public** MemberForm(String email, String password) {  
 **this**.**email** = email;  
 **this**.**password** = password;  
 }  
  
 @Override  
 **public** String toString() {  
 **return "User{"** +  
 **"email='"** + **email** + **'\''** +  
 **", password='"** + **password** + **'\''** +  
 **'}'**;  
 }  
  
 **public** Member toEntity() {  
 **return new** Member(**null**, **email**, **password**);  
 }  
}

#### entity/Member.java

**package** com.example.firstproject.entity;  
  
**import** jakarta.persistence.Column;  
**import** jakarta.persistence.Entity;  
**import** jakarta.persistence.GeneratedValue;  
**import** jakarta.persistence.Id;  
  
@Entity  
**public class** Member {  
 @Id  
 @GeneratedValue  
 Long **id**;  
  
 @Column  
 String **email**;  
  
 @Column  
 String **password**;  
  
 **public** Member(Long id, String email, String password) {  
 **this**.**id** = id;  
 **this**.**email** = email;  
 **this**.**password** = password;  
 }  
  
 @Override  
 **public** String toString() {  
 **return "Member{"** +  
 **"id="** + **id** +  
 **", email='"** + **email** + **'\''** +  
 **", password='"** + **password** + **'\''** +  
 **'}'**;  
 }  
}

#### repository/MemberRepository.java

**package** com.example.firstproject.repository;  
  
**import** com.example.firstproject.entity.Member;  
**import** org.springframework.data.repository.CrudRepository;  
  
**public interface** MemberRepository **extends** CrudRepository<Member, Long> {  
}

#### templates/members/new.mustache

{{>layouts/header}}  
  
<form class="container" action="/join" method="post">  
 <div class="mb-3">  
 <label class="form-label">이메일</label>  
 <input type="email" class="form-control" name="email">  
 </div>  
 <div class="mb-3">  
 <label class="form-label">비밀번호</label>  
 <input type="password" class="form-control" name="password">  
 </div>  
 <button type="submit" class="btn btn-primary">Submit</button>  
 <a href="/members">Back</a>  
</form>  
  
{{>layouts/footer}}