

Бенчмарки:

```
C:\Users\shiln\GolandProjects\go-course-for-students\lesson10\homework\internal\tests\bench>go test -bench . -cpu 1
goos: windows
goarch: amd64
pkg: homework10/internal/tests/bench
cpu: Intel(R) Core(TM) i5-10300H CPU @ 2.50GHz
BenchmarkREST      15709             73272 ns/op
BenchmarkGRPC      31934             37765 ns/op
PASS
ok      homework10/internal/tests/bench 4.032s
```

```
C:\Users\shiln\GolandProjects\go-course-for-students\lesson10\homework\internal\tests\bench>go test -bench . -benchmem -cpu 1
goos: windows
goarch: amd64
pkg: homework10/internal/tests/bench
cpu: Intel(R) Core(TM) i5-10300H CPU @ 2.50GHz
BenchmarkREST      15589             76404 ns/op             10715 B/op             141 allocs/op
BenchmarkGRPC      30937             37366 ns/op             10223 B/op             189 allocs/op
PASS
ok      homework10/internal/tests/bench 4.042s
```

Покрытие тестами:

```
C:\Users\shiln\GolandProjects\go-course-for-students\lesson10\homework>go tool cover -func=report.out
homework10/internal/adapters/adrepo/repo.go:18:      New      100.0%
homework10/internal/adapters/adrepo/repo.go:24:      Add      100.0%
homework10/internal/adapters/adrepo/repo.go:38:      Delete   100.0%
homework10/internal/adapters/adrepo/repo.go:46:      Idxs     100.0%
homework10/internal/adapters/adrepo/repo.go:57:      Get      83.3%
homework10/internal/adapters/adrepo/repo.go:67:      Update   93.3%
homework10/internal/adapters/userrepo/repo.go:17:     New      100.0%
homework10/internal/adapters/userrepo/repo.go:23:     Add      100.0%
homework10/internal/adapters/userrepo/repo.go:37:     Get      100.0%
homework10/internal/adapters/userrepo/repo.go:47:     Update   86.7%
homework10/internal/adapters/userrepo/repo.go:68:     Delete   100.0%
homework10/internal/app/app.go:40:      NewApp   100.0%
homework10/internal/app/app.go:49:      CreateAd 85.7%
homework10/internal/app/app.go:61:      DeleteAd 100.0%
homework10/internal/app/app.go:68:      UpdateAdStatus 83.3%
homework10/internal/app/app.go:87:      UpdateAd 83.3%
homework10/internal/app/app.go:106:     publishedPredicate 100.0%
homework10/internal/app/app.go:113:     authorPredicate 100.0%
homework10/internal/app/app.go:123:     datePredicate 87.5%
homework10/internal/app/app.go:136:     titlePredicate 100.0%
homework10/internal/app/app.go:140:     adsPred 100.0%
homework10/internal/app/app.go:144:     GetAds   88.9%
homework10/internal/app/app.go:159:     GetAd    75.0%
homework10/internal/app/app.go:167:     CreateUser 100.0%
homework10/internal/app/app.go:175:     GetUser  75.0%
homework10/internal/app/app.go:183:     updateUser 85.7%
homework10/internal/app/app.go:195:     deleteUser 66.7%
homework10/internal/ports/grpc/handlers.go:14:      CreateAd 75.0%
homework10/internal/ports/grpc/handlers.go:30:      ChangeAdStatus 75.0%
homework10/internal/ports/grpc/handlers.go:46:      UpdateAd 75.0%
homework10/internal/ports/grpc/handlers.go:62:      ListAds  66.7%
homework10/internal/ports/grpc/handlers.go:100:     CreateUser 75.0%
homework10/internal/ports/grpc/handlers.go:113:     GetUser  75.0%
homework10/internal/ports/grpc/handlers.go:125:     DeleteUser 75.0%
homework10/internal/ports/grpc/handlers.go:135:     DeleteAd 75.0%
homework10/internal/ports/grpc/interceptors.go:12:   SimpleLogger 0.0%
homework10/internal/ports/grpc/interceptors.go:18:   grpcPanicRecoveryHandler 0.0%
homework10/internal/ports/grpc/server.go:14:      NewService 100.0%
homework10/internal/ports/httpgin/handlers.go:14:   createAd 78.6%
homework10/internal/ports/httpgin/handlers.go:37:   changeAdStatus 77.3%
homework10/internal/ports/httpgin/handlers.go:74:   updateAd 77.3%
homework10/internal/ports/httpgin/handlers.go:111:  getAds    87.5%
homework10/internal/ports/httpgin/handlers.go:149:  getAd     75.0%
homework10/internal/ports/httpgin/handlers.go:170:  createUser 64.7%
homework10/internal/ports/httpgin/handlers.go:195:  updateUser 75.0%
```

homework10/internal/ports/grpc/interceptors.go:12:	SimpleLogger	0.0%
homework10/internal/ports/grpc/interceptors.go:18:	grpcPanicRecoveryHandler	0.0%
homework10/internal/ports/grpc/server.go:14:	NewService	100.0%
homework10/internal/ports/httpgin/handlers.go:14:	createAd	78.6%
homework10/internal/ports/httpgin/handlers.go:37:	changeAdStatus	77.3%
homework10/internal/ports/httpgin/handlers.go:74:	updateAd	77.3%
homework10/internal/ports/httpgin/handlers.go:111:	getAds	87.5%
homework10/internal/ports/httpgin/handlers.go:149:	getAd	75.0%
homework10/internal/ports/httpgin/handlers.go:170:	createUser	64.7%
homework10/internal/ports/httpgin/handlers.go:195:	updateUser	75.0%
homework10/internal/ports/httpgin/handlers.go:229:	getUser	75.0%
homework10/internal/ports/httpgin/handlers.go:250:	deleteAd	82.4%
homework10/internal/ports/httpgin/handlers.go:277:	deleteUser	76.9%
homework10/internal/ports/httpgin/middleware.go:9:	myMV	100.0%
homework10/internal/ports/httpgin/presenters.go:64:	DeleteSuccessResponse	100.0%
homework10/internal/ports/httpgin/presenters.go:73:	AdSuccessResponse	100.0%
homework10/internal/ports/httpgin/presenters.go:88:	UserSuccessResponse	100.0%
homework10/internal/ports/httpgin/presenters.go:99:	AdsSuccessResponse	100.0%
homework10/internal/ports/httpgin/presenters.go:119:	ErrorResponse	100.0%
homework10/internal/ports/httpgin/router.go:8:	AppRouter	100.0%
homework10/internal/ports/httpgin/server.go:10:	NewHTTPServer	100.0%
homework10/internal/tests/mocks/AdRepository.go:17:	Add	76.9%
homework10/internal/tests/mocks/AdRepository.go:43:	Delete	83.3%
homework10/internal/tests/mocks/AdRepository.go:57:	Get	76.9%
homework10/internal/tests/mocks/AdRepository.go:83:	Idxs	85.7%
homework10/internal/tests/mocks/AdRepository.go:99:	Update	76.9%
homework10/internal/tests/mocks/AdRepository.go:130:	NewAdRepository	100.0%
homework10/internal/tests/mocks/UserRepository.go:17:	Add	76.9%
homework10/internal/tests/mocks/UserRepository.go:43:	Delete	83.3%
homework10/internal/tests/mocks/UserRepository.go:57:	Get	76.9%
homework10/internal/tests/mocks/UserRepository.go:84:	Update	76.9%
homework10/internal/tests/mocks/UserRepository.go:115:	NewUserRepository	100.0%
homework10/internal/tests/utils.go:62:	GetTestClient	100.0%
homework10/internal/tests/utils.go:72:	getResponse	75.0%
homework10/internal/tests/utils.go:101:	createAd	84.6%
homework10/internal/tests/utils.go:129:	deleteAd	76.9%
homework10/internal/tests/utils.go:156:	deleteAdint	84.6%
homework10/internal/tests/utils.go:183:	deleteUser	84.6%
homework10/internal/tests/utils.go:209:	changeAdStatus	84.6%
homework10/internal/tests/utils.go:236:	updateAd	84.6%
homework10/internal/tests/utils.go:264:	CreateUser	84.6%
homework10/internal/tests/utils.go:291:	listAds	75.0%
homework10/internal/tests/utils.go:306:	updateUser	84.6%
homework10/internal/tests/utils.go:334:	getUser	87.5%
homework10/internal/tests/utils.go:349:	getAd	87.5%
homework10/internal/tests/utils.go:364:	listFilterAds	87.5%
total:	(statements)	82.7%