



Free Deployment Checklist

✓ Step 1: MongoDB Atlas Setup

- ☐ Create MongoDB Atlas account
- ☐ Create M0 Free cluster
- ☐ Create database user (username: bluff-game-user)
- ☐ Set network access to "Allow from anywhere"
- ☐ Copy connection string
- ☐ Test connection: `node setup.js`

✓ Step 2: Backend Deployment (Railway)

- ☐ Go to [Railway](#)
- ☐ Sign up with GitHub
- ☐ Create new project from GitHub repo
- ☐ Set root directory to `backend`
- ☐ Add environment variables:
 - `MONGODB_URI`: Your Atlas connection string
 - `NODE_ENV`: `production`
- ☐ Deploy and get your backend URL

✓ Step 3: Frontend Deployment (Vercel)

- ☐ Go to [Vercel](#)
- ☐ Sign up with GitHub
- ☐ Import your GitHub repository
- ☐ Set root directory to `frontend`
- ☐ Framework preset: `Vite`
- ☐ Add environment variable:
 - `VITE_API_URL`: Your Railway backend URL
- ☐ Deploy

✓ Step 4: Test Your Deployment

- ☐ Test creating a room
- ☐ Test joining a room
- ☐ Test the game functionality
- ☐ Verify database persistence



Your URLs After Deployment

- **Frontend:** `https://your-app.vercel.app`
- **Backend:** `https://your-app.railway.app`
- **Database:** MongoDB Atlas (managed)



Cost Breakdown

- **MongoDB Atlas:** Free (512MB storage)
- **Railway:** Free (500 hours/month)
- **Vercel:** Free (unlimited deployments)
- **Total Cost:** \$0/month



Important Notes

1. **Railway Free Tier:** 500 hours/month (about 20 days)
2. **MongoDB Atlas:** 512MB storage limit
3. **Vercel:** Unlimited deployments, 100GB bandwidth/month
4. **Environment Variables:** Never commit sensitive data to Git



Troubleshooting

- **CORS Errors:** Make sure backend CORS includes your Vercel domain
- **Database Connection:** Verify Atlas connection string and network access
- **Build Errors:** Check that all dependencies are in package.json
- **Environment Variables:** Ensure all variables are set in hosting platforms